

JANUARY, 1874.



\$1.50 A YEAR.

OFFICE, No. 9 NORTH STREET,
Near Baltimore St.

COTTON PLANTING OF '74.

HORNER'S MARYLAND SUPER-PHOSPHATE,

Prepared especially for COTTON from most concentrated materials.

HORNER'S MARYLAND, for Cotton-growing States, is composed of the following ingredients :

Best Peruvian Guano,	750 lbs.
Bone Dust and Concentrated Animal Matter,	1,100 "
Muriate of Potash,	150 " 2,000 lbs.

45 628 of Bone Phosphate,
17. Immediately Soluble,
4.50 Ammonia.

Fine and dry and in best Chemical and Mechanical condition of any other Fertilizer made, at home or abroad. EXCELLENT DRILLING ORDER. ETC.

\$50 per ton, in bags.

JOSHUA HORNER, Jr., Baltimore, Md.

BONE DUST AND BONE MEAL.

From Slaughter-House Bones. 25 years the Standard for Purity and Excellence.

Prof. Tonry and Prof. Wilson render the following analyses of my Bone Dust :

Moisture,	7.52
Organic Matter and Carbonic Acid,	29.94
Lime,	30.47
Phosphoric Acid,	29 16
Bone Phosphate of Lime,	59.63
Insoluble Residue,	2.90
Ammonia,	3.49

WILLIAM P. TONRY, *Analytical Chemist.*

CHEMICAL LABORATORY OF P. B. WILSON,

No. 32 SECOND STREET.

BALTIMORE, JULY 30TH, 1873.

JOSHUA HORNER, JR.

Dear Sir—The following is the result of analysis of a sample of your *Bone Dust*, drawn by myself from a lot of 7 tons lying in your warehouse :

Moisture, (deter. at 212° F.)	3 74 per cent.
Organic Matter containing Nitrogen,	39.83 "
Inorganic Matter,	56.43 "
Containing Phosphoric Acid,	24.73 per cent.
Lime,	29.25 "
Bone Phosphate of Lime,	53.98 per cent.
Insoluble residue,	2.16
Ammonia, about	3 50

This is the best sample of Bone Dust I can find in the market.

Respectfully, etc.,

P. B. WILSON, *Analytical and Consulting Chemist.*

Prepared for Drilling, and packed in Bags, 167 lbs. each, at \$45 per ton.

If, upon the most searching analysis, any admixture or adulteration whatever be found in my Bone Dust, I forfeit the entire price.

My reputation of twenty-five years standing for pure and unexcelled manufactures, precludes the necessity of publishing certificates, besides which, the consumer has to depend upon the character of the manufacturer, rather than upon the merits of any particular issue of Fertilizer, as unprincipled parties may manufacture a good article for the purpose of obtaining Certificates, and the next year fabricate an entirely worthless article.

Respectfully,

JOSHUA HORNER, Jr.

54 S. Gay St., Baltimore.

No. 1 Peruvian Cuano and Chemicals for Fertilizing purposes constantly on hand.

jan1-ly

:

at

y

one

.

at

my

des

ar-

as

and

e.

es

y

to
for
ev
fo

bu
ed
in
ar
tin
sic
co
H
th
fa
pl

do
lie
tin
fo
tin
th
tro
he
tiv
th
of
ta
pe

al
in
br
sa
be
pe

THE AMERICAN FARMER.

"O FORTUNATOS NIMIUM SUA SI BONA NORINT
"AGRICOLAS." Virg.

PUBLISHED BY SAM'L. SANDS & SON, BALTIMORE, MD.

VOL. III.—No. 1.]

JANUARY, 1874.

[NEW SERIES.]

The New Year.

Once again a new epoch is reached from which to date the progress of the affairs of men, and it forms a suitable opportunity for a review of the events of the past and for the formation of plans for the future.

It is not our intention to moralize at this time, but it is proper for us to acknowledge our indebtedness to the Giver of all Mercies for the blessings so richly bestowed upon us in the years that are gone, and to ask their continuance for the time to come. We would also avail of the occasion presented to greet all our readers with the compliments of the season, wishing them *A Happy New Year*, and expressing the hope that they may be blessed with prosperity and health, favored with fruitful fields, and remunerated amply for their labors and patience.

To many the year just closed has been one, doubtless, of tribulation. Thousands who believed they were beyond the reach of such a contingency, surrounded by every mark of security, found themselves, by the sudden changes of the times, reduced from the height of prosperity to the depths of poverty. The causes of these catastrophes are too well known to need repeating here. The shock was abrupt, sharp and destructive. Let us be thankful that to a great extent the desolation has been stayed, and that a rainbow of hope now shines over us. May the lessons taught in the hour of trial not be without a compensating good in the future.

Amidst even the direst of calamities there is always a silver lining to the cloud. No chastening for the present seemeth good, but it is apt to bring forth the permanent fruits of righteousness, says an inspired writer, and so we hope it will be with the recent troubles in our land. At no period of the year would the late panic have been

less likely to cause a general disruption of the business of the country than that at which it came, and then the FARMERS, as they have ever been, were found the hope and salvation of all other classes. They were just gathering in their harvests of grain, and securing the whitened crops of the cotton field,—those products which were eagerly sought with outstretched hands by the nations of the world, who, failing in their own harvests, found their dependence upon American farmers, and freely shipped their gold to our shores for the generous grain of which we had a surplus to spare.

With this introduction of the New Year and the allusion to the one gone by, we must be permitted to refer to our own condition and prospects.

The AMERICAN FARMER, which claims the seniority of all its cotemporaries in the great work of ameliorating the condition of the farming classes, makes its appearance at the beginning of a new year under most favorable auspices, claiming to hold its own in all essentials connected with its publication, and to favorably compare, as we are vain enough to believe, not only with its own high character as formerly maintained, but also with its peers of the present day, able and successful as they have become.

Thanks to the aid we are receiving from many friends, who possess an unselfish devotion to the cause to which their and our own mutual efforts are given, the *Farmer*, we may safely promise, will continue to be as useful in the future as in the past, and with an enlarged field of influence—still further and further to widen, as we hope, by the assistance of our present subscribers—to soon become regarded as indispensable to every progressive agriculturist in those sections to which its attention is mainly directed, and to still merit the countenance and support so freely given it by the foremost men of our day.

Southern Agriculture.

In the *American Farmer* for December we gave an extract from the address delivered at the Agricultural Fair, held at Eufaula, Ala., on Oct. 6th, by the Hon. C. C. Langdon, and which has since been published. We have seldom read one of these annual addresses with more pleasure, as it is evident the speaker has taken hold of the situation of agriculture in the Southern States with the determination of laying bare the true condition of the land-holders at this time and of convincing them of the necessity of adopting measures to save them from the inevitable result of a persistence in the present system, to which they have so firmly adhered since the close of the war. His picture of affairs is gloomy enough, and as it is applicable in some degree to other States than his own, we believe we will render a service to our readers in giving a sketch of his address, in which he so urgently points out a remedy. He says:—

"From every quarter comes up a wail of complaint: Agriculture is languishing, labor demoralized, the cultivators of the soil are in debt, their lands and crops mortgaged, they are borne down with taxes, and are growing poorer with every revolving year. And the condition of the State is equally discouraging. Her treasury is bankrupt; her credit gone; her institutions of learning suspended, and the government itself without the means to defray its ordinary expenses. This is, indeed, a sad picture for both State and people. And is it true? If so, there is certainly something wrong, radically and fearfully wrong, somewhere; and somebody is grievously at fault. I wish I could console myself with the belief that the picture was overdrawn. But I cannot close my eyes to the evidences of its fidelity that are exhibited all around me. I am therefore forced to the conclusion that the situation is mainly as represented, and shall so assume. And on this assumption, the remarks that I may submit to-day will be based."

We will briefly allude to the remedies proposed. In the first place he repudiates the notion that there is any necessity for additional labor from abroad; he affirms the belief that the best of laborers are the negroes now in the State, and declares that the idea is now scouted on all sides of bringing in the Coolies, "the heathen Chinese," and the paupers of Europe, to take their place.

"Instead of 'accepting the situation,' (says he,) and taking the 'new departure' which the occasion demanded after the war, the planters have been racking their brains, taxing their energies, and spending their money, in vain attempts to perpetuate, in some new form, the practical realities of the defunct old system, to wit: large plantations, slave labor controlled by overseers, and all cotton. And the effort to perpetuate the system, so far as relates to large plantations and

all cotton, is still continued, in the employment of negroes to work on shares. The result of it all, is, what we are called on to-day to bemoan. Here, my friends, is the great, the principal, if not the sole cause, of the present unhappy condition of the country. The truth may be unpalatable, but it is truth, nevertheless, and it must be told and brought home to the hearts of Southern planters; for with them alone is the remedy."

Mr. Langdon then proposes, as a remedy for the existing condition of things:

1st. To cease renting land to negroes, on shares, and pay only stipulated wages for labor.

2d. In hiring laborers, to give the preference to our own Southern negroes, of good character, and avoid all forced or bribed importations from abroad.

3d. Change our system, so as to increase, at least, four-fold, the productive capacity of the soil without additional labor, and to cultivate no more land than we can make thus productive.

4th. Diversify the products of the farm, and, as far as practicable, raise everything we need to eat, drink, wear and use; and then make all the cotton we can as a surplus cash crop.

5th. Sell off our surplus lands, on easy terms, first to our own poor but respectable citizens, who have no land and are willing to work; or, second, to substantial voluntary immigrants who will settle upon and cultivate them.

6th. Encourage the introduction of foreign capital and skilled labor, to engage in mining and manufacturing.

7th. Compel the legislature to declare null and void all fraudulent bonds issued by the authority of a corrupt and corrupted legislature.

8th. More reading, more circumspection at the ballot-box, less devotion to party, and more regard for the honor, good name and material interests of our country.

9th. Get out of debt and then keep out—and

10th. Work ourselves and educate our sons and daughters to work.

Mr. Langdon proceeded to discuss these several propositions in a calm, but forcible and convincing manner. We can only just now allude to some of the points which he makes in his remarks. On the subject of labor he says:—

"We can dispense with and help to send out of the State all the worthless negroes, and half of the good ones that we have among us, and still have enough left in the remaining one-fourth to cultivate the land we need to cultivate—the only kind of labor that we stand in need of, is, the labor of voluntary immigrants, men of solid worth, intelligence and industry, who are able to buy our surplus lands, will settle upon and cultivate them, and become useful and permanent citizens. But hired labor is the last thing we do want. We want capital, but not labor. We are suffering greatly from the scarcity of capital, to prosecute all our industrial pursuits, but not from the scarcity of labor. Let us then cease to trouble ourselves about labor, and especially not permit ourselves to be further deceived and humbugged by immigration societies, or immigration agents, who have no higher aim than to speculate upon our supposed necessities. The truth is, that this perplexing labor problem, that has so puz-

zled the Southern brain for the last eight years, finds an easy and satisfactory solution in an improved system of culture."

This conclusion was forcibly and eloquently supported, and the speaker affirmed that the soil of his State, instead of 10 to 15 bushels of corn, or half a bale of cotton, can be, and has been, made to yield 50 to 100 bushels and four to five bales to the acre, and these results were attained "simply by deep ploughing, thorough pulverization of the soil, and heavy manuring, and all guided by intelligence—mind and muscle combined." He instanced the case of Mr. Sandidge, of Miss., reported in our last, where, at a cost of not over six or seven dollars for labor and manure, the usual yield on the ordinary land surrounding him was quadrupled, the product being over two bales to the acre.

Mr. Langdon then proceeds to show that,

"After all, rich lands and large crops of cotton alone will not accomplish what we want. We must DIVERSIFY THE PRODUCTS OF THE FARM, and make at home, as far as practicable, everything we need, to eat, drink, wear and use; and then make all the cotton we can as a surplus cash crop. So long as we continue to make cotton our sole, or chief, crop, and purchase from abroad all the necessities of life, it matters not how rich may be the lands, or how heavy the crops, we shall continue to grow poorer."

He then draws an outline of the results following the system he recommends:

"Appropriate three-fourths of land now devoted to cotton to the production of the necessities of life, and plant the remaining one-fourth in cotton, cultivated as advised, the entire proceeds of which, as you have raised all your needed supplies, will go into your own pocket. And here is the whole thing in a nut-shell. Continue from year to year to improve your land by a judicious and systematic rotation of crops; cultivating clover and the grasses, turning under green crops, and saving carefully and applying faithfully all the manure from your stock. You will thus be saved the necessity of purchasing costly fertilizers; your lands will continue to improve; your crops to increase; and, in a few years, you will have a small surplus of everything to sell. You will be able to spare a blooded colt (for I take it for granted you will have no other than blooded stock,) a Jersey cow, a Merino buck, a pair of Berkshire pigs, a trio of Brahma chickens; you will have a surplus of beef, of mutton, of pork, of butter, of poultry and eggs, of fruit, (you will have an orchard, of course,) all of which will find a ready sale in your cities, towns, villages and factories. Every day in the year you will be able to turn some product of your farm into money, and at the end of the year, or whenever you are ready to sell, the proceeds of your cotton crop will come in bulk—ALL PROFIT AND ALL YOUR OWN. This is prosperity—and this prosperity it is in the power of every tiller of the soil before me, of every farmer in the South, to attain and enjoy. Away then with murmurings, repinings and complain-

ings! Away with despondency! The future of the South is rich with promise and bright with hope. Let us then, ALL, with faith and courage, with cheerful hearts and strong hands, GO TO WORK, effect the desired reform, and reap the promised harvest!"

Last, but not least, the speaker urges the sale of the SURPLUS LANDS, as there is enough land in the State to sustain four or five times its present population, which would increase its wealth ten-fold—probably more. Population is wealth, and by it the power and influence of the State are built upon a solid foundation. We would like to give his views more in full on this branch of his discourse, but must defer them to some future opportunity, and will conclude, at this time, with only a word upon another equally important branch of his theme—the ENCOURAGEMENT OF MANUFACTURES:

"While agriculture (he says) is the foundation of the wealth and prosperity of a State, it has been truly said that only manufactures can build up a great superstructure. These two great interests are mutually dependent upon each other. Neither can attain its full development without the assistance of the other, and no State or country can be truly prosperous and great when either is neglected. The admission of these truths is all that is necessary to my present purpose."

Growing Large Crops of Cotton.

In our last we gave an account of Mr. Sandidge, of Hinds Co., Miss., raising two bales cotton on an acre, which is considered a very great yield. Since the publication of Mr. S.'s statement we have in the *Sandersville* (Geo.) *Herald*, the result of the cropping of Mr. T. C. Warthen, of Washington Co., Geo., in which he claims to have made five bales cotton on one acre of land, and furnishes the following account of the land, its preparation, manuring, cultivation, etc.:

"The soil is sandy with clay subsoil; has been in cultivation for 60 or 80 years, I suppose. About half of the acre was an old dung-hill, the other half very poor before manuring. The guano I used was Kettlewell's AA, or Phospho-Peruvian, 1,400 pounds; raw pine-straw, from the woods, 60 ox-cart loads; green cotton seed, 60 bushels; stable manure, well rotted, 400 bushels. The pine-straw, cotton seed and stable manure I hauled out in January and strewed broadcast over the land, then turned under with a two-horse plow, breaking eight inches deep. Then with a sixteen-inch scooter run in the two-horse furrow, breaking from 5 to seven inches; in the whole 13 to 15 inches deep. I then followed in the scooter furrow with the guano, or subsoil furrow, so on till completed. In February, I repeated the breaking in the same manner, leaving off manuring. In March the same again, breaking each time cross-wise, or in opposite directions. In April, I harrowed the land twice, to level the soil, and destroy the young vegetation. Then I checked off my rows three feet

each way, with a small bull-tongue plow, and on the 13th of May, I planted my cotton seed in the hill, six or eight inches deep, dropped by hand, covered with the foot. The seed when covered being on a level. The seed were the "Cluster Cotton" variety. I purchased them from David Dickson, Esq., Oxford, Geo., to whom I must say I am indebted for my success, to a certain extent. The seed, I am confident, were half the battle. The cotton was thinned to one stalk to the hill in June, with the exception of the outside rows, in which I left two stalks. Then I plowed with 24-inch sweep, "Dickson's," very shallow, one furrow to the row, and about eight days afterwards I repeated the same, running one furrow to the row, scraping the earth enough to destroy the young weeds and grass. Did not use a hoe in it, in order to avoid skinning the cotton; in fact, had no use for any, as the cotton grew so fast the shade thereof prevented all vegetation from growing underneath."

On the Culture of Tobacco.

[The following is the first part of a Report on Tobacco, made by Maj. R. L. Ragland to the Farmers' Council recently in session at Petersburg, Va., and ordered to be published. The concluding portion embraces various suggestions relative to the manner of conducting the sale of Tobacco and advises certain reforms therein, especially in the establishment of Tobacco Exchanges in the large tobacco markets in which the planters are now, by the regulations of those already existing, forbid selling their own tobacco in person, unless at the discretion of the Boards they are admitted as members of their organization. Other matters of a similar character are also treated, and we may hereafter give the concluding portion of the Report in our columns. One remark we will here add from it, that as tobacco is a luxury and not a necessity, it is rather more subject to fluctuations in price than crops grown for the real wants of man—consequently the monetary pressure will probably prevent as good money returns in the immediate future of the crop; "this crop (it is added) for several years has paid well, and in many instances better than any other grown in the States here represented" [Virginia and N. Carolina,] but for the reason just assigned, with the added one that stocks in England and on the Continent are large, the Report advises "as a matter of self-protection to lessen production if we desire profitable returns from the crop to be grown in 1874." The Committee, however, admit that such recommendations are seldom heeded by planters, and advisers do not always practice their own precept, &c.]

Report of Committee on Tobacco.

The first work necessary for this crop is the burning of a sufficiency of land of suitable quality and situation for plants. This work can be

most successfully done in November and December. Early burnings require less wood, and the ground being in better condition before the winter rains sog the land, the work is more effectually done before Christmas. Beds burned before the 10th of December should be made fine, but not sown till January. All beds should be re-sown between the 1st and 10th of March. A thick covering of fine brush is the best protection against killing by frost and drying by winds. A full supply of early, well-rooted plants is so important that your committee could not in justice fail to indicate the best way to secure this important start for a full and fine crop. Land intended for tobacco, except newly cleared, should be fallowed deep in time for the winter freezings to disintegrate and pulverize the soil. When land is frozen or dry, manures may be applied during winter and early spring and spread on the surface to be plowed under in regular preparation for the crop. Manure heavily and cultivate thoroughly if you want a large crop of good quality and high prices. The most successful cultivators of tobacco are those who raise the largest quantity for the surface cultivated. Whatever may be the merits of high farming as regards other crops, it has been demonstrated beyond question that for tobacco it has resulted in perfect success. It requires the same outlay to burn and prepare plant beds, and plant out twenty acres on land that will produce but 500 pounds per acre, as on land that will produce 1,500 pounds per acre. The cost of preparing and cultivating the former is, excluding the cost and application of manures, about the same as the latter. The difference in growing 500 or 1,500 pounds on same land may be stated thus:

30 loads of farm manure at \$1.50.....	\$30.00
400 pounds commercial fertilizer at \$3.....	12.00
Difference in cutting, housing and marketing 1,000 pounds.....	8.00
Expenses on each acre manured.....	\$50.00
RESULT:	
20 acres x 1,500 lbs.—30,000 lbs. at 12 cents.....	\$3,600.00
30 acres x 500 lbs. at 10 cents.....	1,500.00
Excess of manured over unmanured.....	\$2,600.00
20 acres at \$50 cost per acre.....	1,000.00
Profits.....	\$1,600.00

This exhibits a very wide difference in favor of heavy manuring. Admitting, however, that the cost is sometimes greater than that stated above on the manured land, and the yield less, yet with the same manures planters have raised more than 1,500 pounds per acre, still it is apparent that heavy manuring pays best. In the above estimate the manured land is put at two cents higher per pound, when the actual difference is oftener three or more. Good rich tobacco will not grow on poor land unmanured. In the production of fine tobacco the difference is even greater than for shipping, according to the quantity and cost of the fertilizing material used. Commercial fertilizers of the right kind pay better on fine yellow tobacco than on dark shipping. Yellow tobacco requires early planting, a quick start, early maturity and to ripen of a smooth yellow color. Our poor graylands suited to this crop require a fertilizer to promote the growth of plants in the bed and to mature a crop suitable for the yellow curing process. Except for this class of tobacco, heavy manuring and thorough culture will pay best, and this is a fixed fact with planters who

have taken the trouble to count the cost and relative difference in results. There are such a variety of circumstances, local and individual, affecting the sale of tobacco, that only general views may be expressed. If a planter wants to realize the full value of his tobacco, then we say to him never draw upon it, but retain control of it and take the choice of markets and agents. As a general thing the sooner this crop can be put in market in *safe order* the better. The planter is not bound to sell, but can better hold for a rise, with his crop ready for sale at a day's notice. Thousands of dollars are annually lost to the planters of Virginia and North Carolina by failing to order and prize tobacco early before it is injured in the barns; for no crop is so difficult to keep sound and good as tobacco, and none deteriorates faster for want of proper attention. Early sales are generally best.

* * * * *

R. L. RAGLAND.

The Agricultural Implement Trade of Baltimore.

The manufacture of agricultural implements and machinery has long been an important and extensive branch of the mechanical industry of Baltimore, and the ingenuity and energy of her artisans in this line, long since made tributary to her wide stretches of territory. We have not the means of knowing what is the extent of the annual business done here in the fabrication and vending of farming tools, but the sum total must be very great, the section of country supplied from this point being extended and diverse; the reputation of the houses doing business in this trade for the useful and substantial character of their productions having long been established and well maintained.

We have for several months endeavored to find space in our pages for some sketch of the various houses in this line of trade, well known to the readers of the *American Farmer*, from their cards in our advertising sheet; but until now we have been unable to command the room, and we begin below, in anticipation of the opening of the demand for the new year of improved tools and farm requisites, some account of the various houses, with notes on the specialties which each offers to the notice of the planter, farmer and gardener. We will continue these notes in our next.

R. SINCLAIR & CO.

This house is the oldest in its line, not only in this city, but in the whole country. Founded in 1787, the business then begun on a modest scale, has been uninterruptedly continued, with increasing proportions, and an occasional change in the *personnel*, but not in the style of the house. The present members, Messrs. Scully and Cottingham, have both been long in the business, and in all its details and intricacies, have that practical

experience so essential to the successful prosecution of an industry which embraces so many varied departments.

The extensive warehouse and show rooms of this firm are at 62 Light street, running back to Balderston street, and are well filled with all kinds of machinery and tools needed by the agriculturist. Their factory is located on Hamburg and Greenville streets, and is one of the most conveniently arranged and eligibly situated in the country, supplied with every variety of labor-saving contrivances and improved machinery. The main building is 150 by 40 feet, the ground floor being used as a machine shop and planing room, the second story for workshops, and the third for paint shop and storage of materials and completed machines. At right angles to this building runs an addition, mostly of two stories, giving accommodation for engine and boiler rooms, grinding room and blacksmith shop; all well provided with the conveniences of light, air and space, and with water everywhere at hand. The capacity of these buildings admits of the employment of five hundred hands. The foundry is on Gillingham alley, where every description of work is done, from that of the lightest to the heaviest character, and where, as the proprietors say, they are prepared to supply to order any thing "from a needle to an anchor."

Notwithstanding the dullness of the times produced by the financial panic, this house discharged none of its hands, although there was a reduction for a while to three-quarter time, their large force being kept at work in the fabrication of such a stock as will be called for as soon as trade opens for the next season. Messrs. Sinclair & Co. do a large trade with the West and Southwest, besides that in Maryland and the States to the South of her. They also speak of their Tennessee trade as constituting a very considerable proportion of their business.

Of the specialties of this concern, most are so well known, from well-tested experience, for their durable materials, good workmanship and correct principles, that the mere mention of them, which is all we can find space for here, is all that is necessary. Their Straw Cutters and Masticators, Hand and Horse-Power Corn Shellers, Threshers and Separators and Wheat Fans, have long been marked productions of their shops, and their horse-powers and grain cradles they claim are acknowledged to be the best in the country. Scully's Cider and Wine Mill and Press is one of their later productions, and is regarded as a great success. An especial feature is their stock of *Plows*, which embraces almost every kind known to the trade, among which they name as among the most effective and popular, the Farmer's Friend, and the Atlas Virginia Plow, the latter noticeable for the lightness of the standard and the peculiar mode of attaching the mould-board to it. This house is the Baltimore agent for the "Advance" Mower and Reaper, a machine which is claimed to possess many advantages in its simplicity, durability and efficiency, and to have given great satisfaction to the large number of their customers who have bought them. Besides these articles which we specify, Messrs. S. & Co. of course keep a large stock of all other kinds of implements, garden tools, field and garden seeds, &c.

THOMAS NORRIS & SON.

This is another of the old-established and substantial houses in this trade, located at No. 141 W. Pratt. They confine themselves principally to the Maryland and Virginia trade, which indeed requires so much time and attention as to leave but little room for any other,—the Messrs. Norris doing a large business in seeds, besides supplying to a large "constituency" all the numerous articles required on the farm at every season.

This firm are the agents, for this section, of the Walter A. Wood's Harvesting Machines, of which, they say, the merits are so well known that they no longer consider it necessary even to advocate them. Their sales of these mowers and reapers are very large, and it is claimed that farmers once using them will afterwards have no other—so perfect is their construction, so easy their management, and so light their draft. Their superiority, they assert, is shown by the sale of over 20,000 last year, and by many prizes awarded them both in Europe and at home. They also sell the Westinghouse Separators and the Aultman & Taylor Threshers, machines too well known to need particular notice here.

A specialty of this house is a plow invented by the junior of the firm, Mr. John Norris, and claimed to be peculiarly well-named the "Acme." The merits of this useful instrument are conspicuous, not for any novelty, but for the happy combination of the best features of several other popular plows. The standard is very high, and so arranged with reference to the mould-board, as to preclude any liability to choke; the points are reversible and self-sharpening. This plow has already been widely introduced, meeting with great favor. The manufacturers showed us letters from such well-known farmers as Col. Hill, of Prince George's; John Hamilton, Esq., of Charles, and Dr. Waters, of Anne Arundel, attesting the great satisfaction it has everywhere given, and its popularity with the *plowmen*, which is about the best testimony that could be produced in its favor. There are now three sizes made of the Acme: one-horse, and light and heavy two-horse. It is designed soon to make it in steel.

Our notice was called to another article largely sold by this firm, and one as universally needed near the house as a plow is on the farm. It was "Temple's Farm Pump," designed for use both in deep and shallow wells—very low in cost, but effective in operation, and said to be extremely durable. One feature of this contrivance worthy of notice, and distinguishing it from the other cheap pumps in the market, is the cylinder or bucket chamber being made of iron, *enameled* within, instead of zinc or galvanized iron, which materials it is now well understood are as dangerous to health and life, when in contact with water used for drinking, as lead itself. These pumps are so constructed as to work in wells as deep as 100 feet, and are very easy to operate.

This house does a large business in furnishing seeds to the market gardeners near this city. We noticed also a large supply of extra size grindstones, which we were informed are for use in machine shops, and of which a heavy stock is carried.

JNO. C. DURBOROW.

This gentleman, though comparatively a young man, has a proper idea of the requirements of

the implement business; not only having been most of his life a farmer, but having also proved a successful inventor. He is now located at No. 55 Light street, where he keeps a general assortment of implements, field seeds, fertilizers, &c., but gives especial prominence to a few implements, which we will name: For the Kirby Mower and Reaper, Mr. D. is the Southern agent, and is himself the inventor of the "Baltimore Self-Rake," used on this Reaper, and which device required of him in perfecting it a great deal of investigation, labor and time, but which is said by competent mechanical judges to be remarkable for its simplicity and effectiveness. The patent was sold by Mr. Durborow to the manufacturers of the Kirby machines, and is used on no others.—Of these machines the advantages are so continuously presented by their vendor here, in our advertising supplement, that it is not necessary for us now to repeat their claims. It is contended that their simplicity, lightness of draft and durability, are making for them an ever-increasing demand, which is evidenced by the fact that last year over 3,000 were sold to continental Europe and England, in which latter country the Baltimore Self-Rake has been declared "a marvel of American ingenuity."

Mr. Durborow also sells the Diamond State Thresher, a very easy running and simple machine, suitable for either large or small farmers. It is very light of draft, is made in two sizes, and may be run by from 4 to 10 horse sweep-power or by steam. He is likewise the sole agent for Baltimore and Southern Maryland for the Harmon Horse-Rake, an implement of great strength and efficiency, and so easily managed that a boy can direct its use. Another of his specialties is Kenyon's Meat Chopper, designed rather for butchers and dealers than for farmers; but worthy of notice here, as an invention possessing merit and novelty, and destined to wide use. It has already had a large sale in this vicinity, and is everywhere liked when used. It was awarded the first premium at the N. Y. State Fair. Two sizes are made, for hand and horse power.

Mr. D. has also the control in this market of Ball's Plows, which are claimed to be the lightest draft plows in use. A peculiarity of their construction is that they are convertible from cast-iron to steel, or the reverse; or both may be combined, so that a steel share can be used on a cast plow, or a cast point on a steel plow. The plow can by this arrangement be changed to suit any kinds of soil. These plows are coming into wide use in Howard county, giving great satisfaction.

Our attention was called to the Philadelphia Lawn Mower, which, though now out of season, is properly appreciated by all who like a well-kept grass plat, and which is by many conceded to be one of the most efficient mowers offering for public favor. Our restricted limit forbids our giving further space at present to Mr. Durborow's stock.

GRIFFITH, BAKER & BRYAN.

This is one of our enterprising up-town firms, doing mainly a near-by trade with the more populous counties of Maryland, and supplying their farmers and gardeners with all the requisites of tools, machinery, seeds, fertilizers, &c. Their establishment is at Nos. 41 and 43 N. Paca St., where their stock embraces all the staple articles

of the trade, besides others, to which they give special prominence, and which we will briefly notice.

Prominent among them is the Hagerstown or Keller Grain Drill, with grass seed and fertilizer attachments; an implement which possesses, according to the claims of its inventor and agents, advantages commending it over all others, such as its arrangement for securing an ascertained and even quantity of seed to the acre; spring hoes, enabling it to drill among stones and roots and on rough ground; a perfect guano attachment, which works with accuracy and without liability to clog. The grass seed attachment is placed behind the hoes, and these are changeable from straight to zigzag, as is desired by many. The machine is a simple one in construction, and its manufacturers affirm it is made of the most durable materials. The demand was so great for these drills the past season, that more than fifty orders for them were obliged to be left unsupplied by the Baltimore agents.

In Hay-making Machines this house claims to have a combination which is unexcelled, including the "Meadow Lark" Mower, the "Bullard" Tedder, and the "Buckeye" Wheel Horse-Rake. The mower is one of the latest productions of the many which have been offered for public favor; is extremely simple in its working parts; very light of draft, and is said to have been well received wherever introduced. The gearing is all inclosed, inaccessible to dust. The various parts of the machine are united by an ingenious and simple arrangement, and the price is lower than most of the mowers offered.

The Bullard Tedder consists, in its essential parts, of a pair of large wooden driving wheels, and a framework which sustains several oscillating forks, which toss up and stir the hay. These forks are adjustable at different heights, so as to fit the machine for use on rough ground, an advantage, as is claimed, over other machines for similar use. The Buckeye Steel-tooth Horse-rake, it is contended, is one of the most satisfactory in actual use of any introduced. Its device for delivering itself is unique, the labor of operating the rake being performed by the horse, so that any boy who can drive a horse can manage it. Both wheels are provided with pawls and ratchets, which prevent the jarring of the horse in discharging the hay; and as all the teeth move independently, this rake works well on ground where there are stumps and stones.

Among other articles made by this concern is the Tingley Churn, said to be a very effective and convenient one. Another of their specialties is the Pennock Hay Fork, a small but very useful contrivance, of which large numbers are sold.

Messrs. G., B. & B., besides the articles we have mentioned, sell also the "Empire" Thresher and Cleaner, the most popular lines of Plows, Corn Shellers, Straw and Fodder Cutters, Cider Presses, &c., which we cannot here take room to enumerate.

HARFORD CO. (MD.) AGRICULTURAL FAIR.—It is proposed by the clubs of Harford Co., Md., to hold a Fair near Belair, and a committee consisting of Messrs. Archer, Fendall and Kinsey, was appointed to ascertain on what terms a suitable lot can be obtained, who are to report to an adjourned meeting, to be held in Belair, 3d Jan.

The Dairy.

Co-operative Dairying—No. 1.

BY O. S. BLISS, SECRETARY VERMONT DAIRYMEN'S ASSOCIATION.

To the Editors of the American Farmer:

The system of co-operative or associated dairying was practically developed in Central New York some twenty years ago, though like most other new inventions, this is now claimed for some former period. At whatever period, or in whatever country, the idea may have first been conceived, it remained for Jesse Williams, a practical farmer of Oneida County, N. Y., to put it into successful operation. He was skilled in cheese making, and his product invariably commanded a better price than his son's or his neighbor's. Instead of attempting to inveigle the middle men and the consumers into purchasing the inferior goods, in the sale of which he had become interested, upon the reputation acquired for his own, as hundreds and thousands of others have done to their discredit and pecuniary detriment, he determined to bring it all up to his own standard of excellence. To handle the milk of two or three large dairies, in as many different dairy houses, was his primary intention; but the idea of hauling it from the different farms to one central place of manufacture, forced itself upon his attention, and was finally adopted. The very large additional quantity of milk thus thrown upon his hands, necessitated a remodeling of his buildings and apparatus; but Mr. Williams was equal to the occasion, and his experiment, from the first, proved a great success, even far exceeding his own most sanguine expectations.

Of all classes, farmers are, as a rule, most conservative. They always look with disfavor upon any innovations upon the established routine.—But such was Jesse Williams' character and reputation, that while his neighbors commiserated his folly in branching out so freely in the new business, they maintained a respectful demeanor and watched the result of his experiment with the keenest interest. Success is a tremendous stimulant, not only to the successful party, but to the lookers-on, however incredulous they may have been to begin with. The skeptic of yesterday is convinced to-day, to-morrow becomes at least a *quasi* disciple, and the next day sets up for himself in opposition. In all the history of industries, we fail to find another which has had so large, so rapid, and withal so healthful a growth as that of Co-operative Dairying. The data at command are not entirely trustworthy, but there cannot be any doubt but that there are over 3,000 factories for making cheese, butter or condensed milk, in the United States; and the system has reached very considerable proportions in Canada, in Great Britain, and on the continent of Europe.

But timid men began years ago to fear that the business will be overdone, and that reaction will follow. In answer to this, we need only to remind them that this wonderful growth is not an accretion, but rather a change from one system of manipulation of a raw product, to another—that this wonderful development, of which we were just now quite inclined to boast, is after all more apparent than real. During the period

since the inauguration of the co-operative system, the increase in population in our own country has been more rapid than that of the cows, while the means and inclination of the non-producing classes to consume larger quantities of all kinds of dairy products, have increased even more rapidly. According to the census of 1850, there were 3.61 persons to each cow; in 1860 there were 3.66 persons to each cow, and in 1870 there were 4.31 persons to each cow. In the meantime, we have built up a very heavy export trade in butter and cheese and condensed milk. But there is still another and more encouraging reason for assuming that we have nothing to fear on the score of over-production, and that is in the increased demand for a higher grade of goods, which the co-operative system has largely stimulated. It is a well-established fact, that the *per capita* consumption of dairy products is on the increase, and fully keeps pace with the improvements in the quality of the goods thrown upon the general market. The popular motto is, "get the best," and in no other department of production is there so much inducement to make only the very first quality goods. No process has ever been discovered by which a second or third quality of butter can be produced at a less cost than the first, and the same is practically true of cheese-making, though there are apparent exceptions in some cases, where the milk is worked for both butter and cheese. If farther evidence is needed to sustain the position that there is as yet no apparent reason for fearing an excessive production, we have it in the present condition of the markets. Prices have been well sustained throughout the season just closing, notwithstanding the financial panic and the consequent disorganization of society in the manufacturing centers. It is believed, moreover, that the consumption has rarely been so close upon the heels of production, as at the present time.

Manifestly, then, we may, without prejudice to any interest, urge upon farmers favorably situated the cultivation and expansion of the dairy interest. Dairy farming, relieved of much of its drudgery and uncertainty by the co-operative system of working up the product, is adapted to a much wider range of country than has been believed in the past. Large sections of the older States, which have become practically exhausted of some of the elements necessary to the successful prosecution of former methods of tillage, may, by the recuperative influence of dairy farming, be made to cheer the heart and swell the purse of the owner, as in the olden time of virgin fertility. [Passing over for the present, at least, the subject of dairy farming, the next paper of this series will be devoted to getting up, organizing, and operating cheese and butter factories.]

"THE COW;—The Best Breeds—How to choose a good Cow—How to keep her in permanent profit."

We have had on hand for some time, (furnished us by a valued Pennsylvania friend, who is an authority in such matters,) a copy of an Essay bearing the above title, which was read before the Experimental Club of Chester Co., Pa., by Willis P. Hazard, Esq.

The internal evidences of great practical value which the paper bears, especially at this time when increased attention is being paid to the cultivation of the grasses and the breeding of improved cattle, would be sufficient for us to present its substance to the readers of the *American Farmer*, but to this we have added the approval of our experienced friend who favored us with the paper, and we have delayed its publication until now, in order to present the whole subject in our new volume and to an increased number of readers.

Mr. Hazard bases his remarks upon the question, "What are the best breeds of cows for butter and milk dairies?" but includes in the enquiry also, the three leading points to be considered in cattle raising, *yield, profit* and *food*; or, in other words, "the early period at which they are ripe for the butcher; the great amount of food they produce in return for the food they consume; and the large proportion of prime meat which they yield. A proper consideration of these three points will naturally tend to the study of 'How to select a good cow,' and having obtained such an one, 'How to maintain her in the best condition for profit.'"

We select for the present, his remarks on the four prominent races, and in a subsequent number will follow up the description, which will be more brief, of the several other varieties known to the world, but not so generally found in this country—and begin, first, with the

Short-Horns (or Durhams).—Much has of late been said of this breed of cattle, and as we have published descriptions, with portraits of these animals, accounts of their origin, great value for beef, &c., and especially of their history, as set forth in a series of able papers from the pen of Mr. Coffin, the principal breeder of them in Maryland, and published in the first volume of the present series of the *Farmer*, we will give in a condensed form, the remarks of Mr. Hazard upon it. Of its introduction into this country he says:—

In 1815 and 1816 a few Short-horns were imported into this country, and for the next four years more were imported into Kentucky, were carefully bred, and from thence spread through the Western country. In 1834 an association in Ohio brought over nineteen head, and in the following year two additional lots, and since then several hundred with well-established pedigrees have been imported into the United States. From the fact that the first prominent breeders of the Short-horns resided in Durham county, they took the name of Durhams, and have so retained it with many ever since.

During the fifty years the Short-horns have been domesticated in this country, they have been imported in greater numbers than any other

breed, they are more widely known, and have acquired greater popularity; surely this must have been from some good qualities which have so strongly tended to recommend them. They have become acclimated, and are healthy, thriving on common food equally well with our native cattle. They are of large size, fine tender meat, grow rapidly, and take on meat and fat fast in proportion to the amount of food they consume, make powerful and docile oxen, are excellent in the dairy, giving large quantities of milk and butter and rich cheese. With all these qualities, we might readily suppose pure Short-horns were just the breed for Chester county farmers. Our own choice and what we have for our own use is the Durham, the Jersey, and the Durham and Jersey mixed, and we feel thoroughly satisfied with them. Wherever there is good pasturage, and plenty of winter fodder, the Durhams will thrive well, but they are not the breed for stony land, with scant herbage, where they have their living to earn; the Devon or the Kerry cow are the ones for that.

They are *naturally* good milkers, and where raised for that object no milk cows exceed them. It has been from the undue attention to their beef-producing qualities that has led many to suppose they were not as good milkers as some other breeds; we have always found their milk to be very rich.

As to the color, tastes differ. Red, red and white, and the red roans, are mostly preferred, but any color from red to clear white is a good Short-horn's color. White is usually least preferred, simply as a matter of taste, and therefore as a color for thoroughbreds is not so salable; but for the beef-breeding, it is of little consequence the color, so that the animal itself is good.

The Devons.—The Devons may fairly next claim our attention as perhaps next to the Short-horns, more of their breed have been imported into this country than of any other. Of this breed, whilst on a visit to Devonshire last year, we noticed two kinds, the North and the South Devons, evidently originally from the same stock, but by a long course of breeding in special localities, of quite different appearance. The North Devons of smaller size, and a deep rich red color; the South Devons more of a tawny red, rather larger and more chunky; the cows of the former weighing about one thousand pounds, and those of the latter about twelve hundred pounds. The South Devons are very beautiful, of small bone, but of very fleshy appearance, as they rapidly take on flesh at two and a half years old.

The Devons, while giving moderate quantities of milk, give that of very rich quality; therefore for those who have milk dairies we should not recommend them, but a few to help the butter yield and improve the color is desirable. As oxen, they have no superiors, being of moderate size, weighing about fifteen hundred pounds, though often fattened to two thousand pounds; active of foot, though their short limbs would hardly indicate it; easily fattened, as they "take on" very quickly; affording the choicest meat for the butcher; and withal they are docile, amiable, and easily taught; they will thrive where larger or more delicate animals would hardly live, being hardy and vigorous.

The Ayrshires.—Among the milk breeds prominent in the British Isles, the Ayrshires hold a leading place. They derive the name from the county of Ayr, in Scotland, where they are principally kept. Their superior qualities as milkers, and hardness of constitution, have induced various writers to attribute part of their origin to their favorite breeds. Nearly equal testimony is offered in favor of the Holderness, the Short-horn, and the Alderney, though the weight of the testimony is in favor of the Alderney. They have always borne the character of being prolific milkers, with rich butyaceous quality, particularly in proportion to their size, which is small. The county of Ayr is in a high exposed region of cold clay soil, producing quantities of heather in the moors, with a damp climate, though mild. The Ayrshire farmers finding more profit in their dairies, have paid great attention to improving this breed, so well suited to them, and perhaps no breed affords a better illustration of what care and design will do to develop peculiar properties in an animal at the expense of other qualities. The result is a dairy animal of the highest quality, and they have been introduced largely into England, the North of Ireland, and this country.

Instances are cited of large yields, but we believe the usual average to be six hundred gallons per year, or one hundred and seventy-five pounds of butter, or four hundred and thirty pounds of cheese, where they are well fed and cared for. The beef is excellent, the fat being much mixed with the flesh, though not a favorite with the butcher, as he cannot sell so much tallow as from other breeds.

The Jerseys.—The Jerseys, or formerly called Alderneys, from the fact that they were imported into England from the Channel Isles, of which Jersey and Alderney are well known, have of late years so occupied public attention, that we must devote some space to their well-defined merits.

The Jerseys are noted for the extraordinary richness of milk, and their beautiful form, thus making them the most desirable breed for small country places, for crossing with other breeds to improve the strain of milking qualities, and for giving character to the butter of the dairyman.

Brought up in a mild climate which hardly knows any winter, they have been imported into this country, and stand the change and the rigors of our winters nearly if not quite as well as our natives; and in fact improve so much in this country that many good breeders claim that we have fine cows born here of the Jersey breed that are superior to the majority of those in the Channel Islands.

In their native country great care is taken of them; they are housed from the wet, are carefully fed, and form almost as much one of the family as the pig in Ireland. With the constant contact they have with the farmers or mostly their wives, who have the principal care of them, the cows become very docile and affectionate. In this country, where the same care is not taken of them, they sometimes become wild and even very cross.

The peculiar colors and beautiful shape of the Jerseys at once excites attention, and enables them to be recognized at a glance, their deer-like heads and large prominent eyes being very notice-

able. Their chief characteristics are: in the cow, the head is small, thin, and rather long; her horn is short, delicate, and curved forward, white with a dark tip; her muzzle is black, and encircled with a band of light color, as is the eye, which is bright, large and prominent; her ear is small and flexible, the inside skin being bright yellow; her neck is thin and delicate, and of a medium length; her shoulders thin and sloping, and forming with the fore-ribs a gradual slope outward to the hips; the back tolerably straight from withers to setting on of tail, though generally with some sway from the size and weight of the stomach, which is large; her loin is wide, and her hindquarters well spread, and pelvis roomy; her tail is long and delicate, with a full brush at the end; the thighs are thin, chest deep, though narrow; legs very fine below the knee; hocks slightly turned inwards; udder large, reaching well forward, with teats of moderate size, placed wide apart; skin thin, and not too loose; hair smooth and fine. The color varies: yellow, yellow and white, mouse color or dun, brown, and almost black, are the chief tints. The bulls are usually darker than the females, and the depth of color increases with age. The head of the calf is strikingly like that of a fawn, and at all ages the peculiar coloring, large dark eye, and flexible ear, give the head a deer-like look.

The milk of the Jersey cow is particularly rich, and is of a deep yellow color, yielding a butter a rich golden color, and of peculiarly firm grain and fine flavor. The amount of cream is proved to be from 19 to 25 per cent. While the quantity given is not large, but in proportion to her small size good, its peculiar richness and color make it of great importance in giving character to the milk of a dairy. Twelve quarts per day is perhaps a fair average, though it is proved by analysis to be far richer in butyrateous qualities than that of any other breed.

The Jersey is not a large consumer, even in proportion to her size, and when dry thrives fast, and makes excellent beef; the calves are, however, not a favorite with the butcher. As a breed to cross with the native the Jersey has no superior; refining those of a coarse tendency, and giving her peculiarly rich color of milk, cream and butter. The principal drawback in its breeding qualities is that they are not sure getters.

It was our intention to present in this issue of the *Farmer*, as a fit accompaniment to the above account of the Jerseys, an engraving of a portrait of a cow of that breed from one of the best of our Maryland herds, which would serve to exemplify the characteristic appearance described by the writer. We were disappointed, however, in doing this, from a failure to secure the picture in time, and we give on another page, as a substitute, a cut of the celebrated Jersey cow, Duchess, owned by Mr. C. L. Sharpless, of Philadelphia. We are indebted for this to a work entitled "*The Jersey, Alderney and Guernsey Cows*," by the same author as the essay above quoted, Mr. Hazard, and published by Messrs. Porter & Coates, Phila. This book has already been noticed in our pages, and to those who are desirous of fuller information on the merits of the Channel Island cattle, it will be found agreeable and instructive reading. *Eds. A. F.*

Our Agricultural Calendar.

Work for the Month—January.

At the coming in of a new year it is proper we should extend to our readers those greetings peculiarly fitting to the season, when a new era of time begins, and we wish all *A Happy New Year!* May seasons be propitious and harvests fruitful; may peace, happiness and health prevail, and may the year now beginning, close to all with a sense of the mercies bestowed by, and the gratitude due to, the Author of all good.

This is the appropriate season for the husbandman to determine upon and lay out the system he intends to pursue. Calculate this with calmness and caution; but once decided, let nothing move you from the path laid down. Expedients and make-shifts are too much relied upon, and a dependence upon them is a blot on the character of our agriculture. Well-digested plans, adhered to, will not fail to be in the end more profitable than the resort to contrivances which seem to promise quick profits.

Do not mark out too much to be done. Do not over-crop yourself, and surrender thoroughness to quantity. Consider the labor and manure at your command, and undertake nothing which cannot be done properly and at the proper time.

Winter Plowing.—The season, so far, seems to vary from those which for some years past we have experienced, and much plowing has been done. Should mild weather continue, endeavor to break up all your tenacious clay lands which are to be put in spring crops. The improvement in texture, besides the liberation from their insoluble condition of elements fit for plant food, by the agency of the frosts, produce effects with which most of our readers are familiar; besides the destruction of the dormant insects, which is claimed by many as one of the most beneficial results of the practice under notice.—Land should be so plowed as to expose as much as possible of the upturned earth to the influence of the weather, but care should be observed not to plow too wet.

Surface Drains.—Care must be taken that they do not become obstructed, and thereby allow the accumulation of water about the plants of winter grain, which is very apt to result in their destruction.

Fencing and Firewood ought to be gotten out and hauled in. Posts and rails may be worked up under shelter during bad weather, and the contents of the wood-shed ought never to get low.

Working Animals.—Comfortable quarters, good food, and careful and regular attention, are needed more at this time of the year than at almost any other. Endeavor to see to it that your mules and horses are not the sufferers from the inclemency of the weather, and that they are not unnecessarily exposed. Their stalls should be well littered and properly cleaned, and the animals rubbed down night and morning. Whenever practicable, give them regular work.

Milk Cows.—Give these warm stabling, plenty of feed and water. A quart of meal night and morning with some bran and roots, if you have been provident enough to provide them, will make an appreciable and profitable increase in the milk. When possible, have the cows carded or curried as regularly as your horses. Thorough cleanliness in everything about milk cows pays.

Cows and Heifers in Calf, and Brood Mares.—Give these liberal supplies of nutritious food. It is not necessary they should be kept fat, but the demands upon them require more than the ordinary amount of nourishing provender. Provide warm, dry shelter for all such animals. It is bad policy and poor economy to allow them, or *young cattle and colts*, to become poor and thin; this latter class should always be kept in a thriving and growing condition.

Sheep and Swine.—Keep the former dry, but turn them out for exercise when the weather is good. Put straw on the floor of their shed, and have salt regularly provided for them. Have also good warm and clean pens for your pigs. Supply rough material for bedding, and have ashes and charcoal, or rotten wood, within their reach. Clean water, too, is a necessity for them. Keep them well fed and in thrifty order.

Poultry.—See that their house is clean, warm and dry. Vary their food, if you would have a supply of eggs in cold weather. Give them some sort of animal food, as well as raw corn, too much of which undoubtedly tends to disense. An occasional mess of boiled and mashed potatoes and turnips, or other vegetables, is good for them, and so is milk.

Manure Making.—Do not neglect the opportunity offering for gathering materials for your manure piles and compost heaps. Mix whatever substances suitable for this you can gather around and on your place with the manure from the horse and cow stables, and the pig pens. It is a good plan to mix these all together, and to make from time to time an addition of a sprinkling of plaster over the whole heap, which, as far as practicable, may be occasionally turned over.

Poultry Dung.—This should be saved by itself, as it is especially valuable, equalling, it is said, good guano. Either keep in barrels under cover, or else mix it with sifted coal ashes, and allow it to remain in a heap under some shed or other shelter. It might be well to mix a little plaster with it. For the garden it will be found especially useful.

Open an Account Book.—This is a good time to begin, if you have not been doing it, to keep an account of your farm operations, your expenditures and receipts. This is too often entirely neglected, but ought not to be. It is as important for a farmer to keep an account of his business, as it is for a merchant. We commend this matter to every reader's attention, believing if the practice was once adopted, as suggested, it would hereafter always be followed, so much does it conduce to the satisfaction with which farm operations are carried on.

Horticulture.

Pears and Pear Culture.

To the Editors of the American Farmer:

I do not wish to be considered selfish concerning my occupation, or unwilling to accede to your polite request, but I do think that you have a number of contributors to your journal that would do more justice to the subject of Pear culture than I can, though, as you seem to think the contrary, I will endeavor, in as brief and practicable a manner as possible, to give my experience.

The site for a pear orchard should be an elevated and dry piece of ground, and, if possible, a red clay subsoil, sufficiently rich to produce at least sixty or seventy bushels of corn in a good season. I prefer a clover or timothy sod, which should be ploughed shoal in the fall and let remain until spring, when the sod will be thoroughly rotted; it should then be harrowed nicely each way; then ploughed again with a large plow as deep as possible, and follow it with a subsoil plow, which stirs the subsoil to the depth of 10 or 12 inches; after which I harrow again thoroughly, then mark out the ground each way with a large plow, so that the trees will stand 10 by 10 feet for dwarfs. Should I wish to plant standards in the same orchard, I put every other tree in every other row a standard. After the ground is thus prepared, it is but very little trouble to set the trees, as the holes are all dug, since the whole orchard is a hole, for after preparing a piece of ground in this way, on which I planted 3500 trees, I did not strike hard bottom in setting a tree.

I prefer spring to fall planting, because the ground, after having been prepared in the foregoing manner, will remain in a much better state for the trees to make good roots the first summer, from the fact of just having been subsoiled, and not having become packed and hard, which it would have done had it have been planted in the fall and subjected to the winter's rain; the ground is also in much better condition for tillage, and my experience is, that the trees make a much better growth than if they had been planted the fall previous. As to the depth I plant them: that depends altogether on the length of the root stock of the dwarf pear, for which I always use the Angers Quince, and in planting I always put the quince or root stock at least four inches below the surface of the ground, so as to allow the pear stock to take root when it is budded on the quince, which it will do in a few years, and greatly assist in the support of the tree when it arrives at maturity, or bears a crop of fruit. The standards I always plant the depth that they grew in the nursery. I have now about 7000 trees in orchard, all of which are dwarfs except about 500. As to age of trees to plant, I greatly prefer one year old to all others. If budded on No. 1 stocks they will make a growth of from four to six feet in the nursery the first year, and after they are planted out in the orchard you can then shorten back to any desirable height and prune as they grow to any shape you may desire. I greatly prefer a pyramid to any other shape, and prune very severely to induce a stout,

stocky growth. I am aware that this is objected to by some; they say (and it is very true) that some trees put out too many shoots or branches, which I admit; but, in such cases, I am never at a loss to know how to prune to shape my tree, for I can easily thin out if too many, but if not enough, I am at a loss to know how to put them in just at that time; and, in the second place, by close pruning I get the fruit set on stiff, stout limbs near the body of the tree, where it is not so liable to be shaken off by storms, the fruit on such trees being always larger and always commanding a higher price.

As I have a limited practical-experience with but few varieties, I shall only speak of those that I have thoroughly tested and seen tested by a number of others around me, and recommend only such as have proved with me to be almost entirely free from *blight*, the only drawback to pear culture, for nothing can be more discouraging to the amateur pear grower than to see his trees one day rich in the promise of an abundant crop and a few days afterwards to see one-fourth or probably one-half of them swept away by disease. It is because I have felt this bitter disappointment that I would warn your readers against planting such varieties as are so subject to the blight, or at least have proved so with me. I would save *them* from the discouragement and losses which I have experienced, when it was out of my power to prevent it. They, I think, *can*, for pear culture to-day is in my opinion no longer the uncertain occupation it was ten years ago; we of to-day have our choice of varieties, not subject to disease, (if a proper situation for an orchard is selected,) so let us make it judiciously, and we may be sure of a paying crop every year, when the trees are old enough to expect it. In 1864 I planted an orchard of 3500 trees of the following varieties: Beurre Giffard, Bartlett, Louise Bonne De Jersey, Duchesse, Beurre D'Amalis, Vicar of Winkfield, Glout Morceau, Urbaniste, Beurre Diel and Beurre Easter, all dwarfs, and budded on stocks of my own importation, from the celebrated nursery of D. Dauvesse at Orleans, France. I thoroughly cultivated them, and pruned every year, with the view of forming pyramids, and the most of some varieties were pictures to see, particularly the Vicars; the fruit was taken from them all until the fourth year, when the most vigorous growers were allowed to bear a few specimens. I continued to partially rob them of fruit until they were six years old, when I let as many remain as I thought the tree could mature perfectly, having then as much wood as I wanted to begin with; the seventh year they set a handsome crop of fruit, and I had every prospect of a large yield, but alas! the blight commenced, and with the exception of the Duchesse, Bartlett, Beurre Giffard and Urbaniste, nearly all blighted; the Bartlett and Urbaniste have blighted some little, but so far I succeed in checking it by cutting out below the part affected; this I could not do with the others; have not had a Duchesse or Beurre Giffard to blight yet. I have never used any of the numerous remedies suggested by the various writers on the subject, from the fact that I have succeeded in checking it by cutting out, and have since been planting such varieties that are not subject to it. There are two other varieties that

I have omitted to mention, that I have seen tested which are as free from blight as the Duchesse, namely Howell and Lawrence. As the trees blighted I grubbed them up, carefully taking up the old roots, and replanted with Duchesse, which have grown finely, some of them fruiting last year and this, and promising to make as fine trees as if they were the first that occupied the places. In 1869 I planted about 3500 more, all Duchesse, Bartlett and Lawrence; the last named are standards and a late fall variety, which prolong the season several weeks. I am now preparing a piece of ground (a timothy sod) for another orchard, to plant next spring, and shall restrict myself to but four varieties, viz: Duchesse, Bartlett, Lawrence and Howell. Were I to plant for private use, I would add several varieties to the above, that are very hardy, but poor bearers, and would not pay for market purposes.

I greatly prefer pruning in the spring, as soon as the sap begins to flow, to any other time, for then the incision made with the shears will heal over much sooner, and as I always cut near the bud that I wish to be the leading shoot, the sap is checked there and is certain to force that bud more than any of the others.

For the first four or five years after planting, the space between the trees can be cultivated in potatoes or vegetables of any kind, and it will be an advantage to the trees, particularly if in potatoes, which can be raised with profit, beside having the trees cultivated. After that, the trees will require all the space, but keep them thoroughly cultivated, for I greatly prefer seeing grass grow in my pasture fields or hay field than in my pear orchards. I have seen the grass experiment tried and think it a failure.

Manuring.—Should the piece selected for an orchard be rich when the trees are planted, it will not require any manure except what is necessary to produce good potatoes or vegetables, when tilled in such, until the trees are eight or ten years old and producing heavy crops, when they will need more manure or cease making new wood or growing. I have never had that to do yet, but shall commence next spring and give my trees about 500 pounds of ground bones per acre, and if that is not enough, will repeat the dose the next spring. The trees being only 10 feet apart, I am compelled to use something that can be applied by hand, for we cannot get in with a team.

I have never purchased a tree, preferring to import my own stocks, and work them with such varieties as I wish to plant. I use nothing but the first choice two-year old transplanted Angers Quince to bud on; they are that age when I get them in the spring; I then give them another year's growth and bud them the following fall; they are then three years old, and must produce a fine tree the following summer.

I cannot give you the exact average per tree in full bearing, from the fact that I replanted those that blighted, and have been replanting every year since, and have trees in the same orchard from one to nine years old, and a great many of those that I first replanted are now bearing; but I am certain the oldest trees have averaged for the last three years a bushel to a tree or 435 bushels per acre, most of which were sent to your market and bought by canners at compensating prices.

In reference to the fruit that I exhibited at Pimlico, inquiry is made if it had any special treatment given over the rest in the orchard. I answer, none whatever; it was raised on the trees planted in 1869; three-fourths of the fruit of the Duchesse averaged a pound each; fifteen of the Duchesse that I exhibited there weighed over 24 oz. each when taken from the tree; the balance of them varying from 18 to 23 oz. The large one weighing 31½ oz. was raised by Mr. J. H. Raymond of our county, who has quite a fine orchard of pears, and is raising them with perfect success, but he gives them his undivided attention, and keeps them entirely free of weeds and grass, prunes to form a pyramid, does all the pruning himself, and says it is more of amusement and recreation than otherwise.

Respectfully yours, R. S. EMORY.
Kent Co., Md., Nov. 25, 1873.

Variation in the Season of Ripening of Peaches.

To the Editors of the American Farmer :

During the last three or four years there has been quite a variation in the season of ripening with many varieties of peaches. Confining ourselves more particularly to the "medium season" and later kinds; as, for instance, Crawford's Early and Old Mixon free in many orchards have ripened so as to be shipped at the same time, while originally a full week intervened between the two. Again, that elegant peach, "Stump the World," which should properly be in season with Crawford's Late, in many instances which have come under my notice within the time mentioned above, has varied as much as ten days from its original season, (coming earlier in every instance.) Again, from several orchards I observed this season, that Smock's free and Crawford's Late were being forwarded at same time, and many other facts of a similar character have come under my observation, not necessary to note here.

That a majority of the standard market varieties of the present day, as grown on this peninsula, are much more variable in their seasons of ripening than they formerly have been, is a fact that the experience of most of market growers will sustain, the respective influences of soil, situation, condition and cultivation being duly considered. Now, why a variation with some varieties in the same orchard and not with others, while all receive the same treatment, on the same kind of soil? Why is it more perceptible now than in former years? Seasons of course are unlike, but the variation thus caused would not alter the particular of one variety in comparison with another.

Are not, then, certain varieties constitutionally or naturally weaker than others? Certainly such are facts, patent to the minds of all practical and intelligent growers. Are not many kinds becoming weaker annually? The fact of their coming in *ahead* of their original seasons, is a strong argument in the affirmative. Experience dictates that the original nature and distinctive vigor, peculiar to each variety, is greatly changed and weakened by the general mode of propagating the trees, as, for example, seed in many cases are collected and planted without any discrimination whatever—those from healthy, vigor-

ous trees being jumbled together with others from stunted and enfeebled trees. Certainly the stocks produced by the latter possess not the requisite vitality and strength to insure sound, healthy trees, while in the operations of "budding" there is another practice equally prejudicial to the longevity and health of trees, which is, the reckless collecting of buds from trees in all kinds of conditions.

None other but seed from sound, healthy trees should be used, and too much care and good judgment cannot be exercised in procuring buds. My opinion is, that had those two points in the propagation of peach trees always been properly regarded, the deterioration in many varieties of to-day would never have been known, and that unless due caution is observed in that respect, peach growers will drift into a much worse state of confusion, relative to varieties, than is now existing.

Very truly yours,
Denton, Md., Nov., 1873. J. W. KERR.

Notes on December No. American Farmer.

To the Editors of the American Farmer :

THOMAS HARROW.—No implement has been introduced of late years which is of greater value in the market-garden and nursery than this. For rapid and perfect pulverization of the surface it is unequalled. How it answers on limestone clay we cannot say, but on our loamy soil we would be puzzled to supply its place. We have had one in constant use in our truck garden and nursery for two years without a cent spent for repairs. With negro workmen no implement can be too heavy and strong, but a negro is an animal we don't keep on our premises. No man with intelligent laborers will go to the trouble of making a brush harrow when he can get the Thomas Harrow.

DEEP PLANTING PEACH TREES.—My experience in planting peach trees does not tally with that of your correspondent from Baltimore Co., and I am of the opinion that the rapid growth of his trees in the filled-up gully was due more to the fact that the soil was richer and well underdrained by the brush, than to the deep planting. The writer has planted many peach trees by contract in years gone by, and, as all the failures had to be made good, took especial pains to ascertain the best method of planting to secure the life of the tree. I found myself gradually planting more and more shallow, and, in one orchard, which I now call to mind, the trees were planted in holes not over three inches deep, in a sandy soil, and the earth rammed and banked so as to bring it to the exact depth at which the tree grew in the nursery. The losses in this orchard amounted to just one tree in a thousand, whereas in my first planting experiments in deep holes, the loss was sure to be considerable. Deep planting may do in some peculiar locations, but as a rule I prefer to cross out the land with an ordinary furrow, and plant at the intersection, with little, if any, additional digging.

THE PERSIMMON.—If "Plowman" will visit some parts of the Eastern Shore, he will not consider a persimmon three inches in circumference very large. I have seen them much larger; but, as a rule, I think the largest of our native persimmons are the poorest in flavor.

I well remember three trees, from which, when a boy, I gathered fruit. The trees stood in a group in the centre of a large field; two of them bore enormous fruit, the third bore fruit smaller and more elongated than the others. When ripe the large ones were soft and juicy, but never entirely got rid of a certain amount of persimmon "grip." The smaller fruit when ripe was as dry and sugary as a date. I have never propagated them to any extent, but would advise "Plowman" to get some of the smaller roots of the variety he wishes to grow, cut them in pieces an inch or two long, and bury in damp sand out of reach of frost until spring, then plant in drills three inches deep, and, if protected from drought, I have no doubt he will find them coming up shortly. Grafting on the root will doubtless also succeed.

ENGLISH WALNUTS, FILBERTS, &c.—Your correspondent, "N. F. F.," I take it, is an Englishman, who has not had many years experience in our climate. If so, I think he will find after awhile that in all the catalogue of nuts and fruits, none is more uncertain in this climate than the English walnut. If he succeeds in ripening a crop once in ten years, as an average, he will do better than most folks who have tried them. The tree is a rapid grower and very handsome, and is well worth growing for its beauty; but in our experience a spring frost which has no effect on peach blossoms will kill the crop of English walnuts without fail. Filberts are easily grown and are productive. The best way to work the walnut is by annular budding or grafting, that is, by cutting out a ring of bark and inserting a similar ring with a bud in its place. I know one large tree which was cleft-grafted into a black walnut stock; the entire black walnut head was finally cut away, and the tree now stands on black walnut trunk fifteen feet high.

GOOSEBERRIES AND CURRANTS.—If "N. F. F." expects to grow currants here for a profit he had better drop that *single stem* idea, unless he wants to replant his bushes every three or five years, which is about the extent of their lives on a single stem. The English gooseberries do better on a single stem and with an open head than otherwise; but English gooseberries are not profitable or reliable in *any shape* here. Our American gooseberries should *always* be grown in the bush-shape and *not* kept to a single stem, if they are grown for profit; but if one wants a few neat bushes in a well-kept garden, the single stem is prettier; but for currants, the single stem won't do. I say this from a costly experience.

I am glad to see that the *Farmer* is devoting more room to horticultural matters, and think that more short practical articles and fewer long inappropriate theories would be a further improvement.

W. M. F. MASSEY.
Riverbank, Chestertown, Md.

ADAMS' EARLY CORN.—An Agricultural Department correspondent in Powhatan Co., Va., says this is decidedly the best garden corn he ever planted. He planted April 22, and gathered Aug. 15, when it was hard enough to grind. He is going to plant it as a field corn next spring, and expects to get corn meal from it by 1st Sept. It bears two ears to the stalk, which are large and well filled.

Correspondence.

On the Application of Lime.

Editors American Farmer:

On page 412, Nov. issue of the *Farmer*, appears a correspondent's notice of remarks made by me at a previous meeting of the Gunpowder Agricultural Club of Baltimore Co.

By an error of the type, the question of discussion appears to have been the relative value of "*crusted*" and calcined (burned) lime. It should have read "*crushed*," &c. The type also makes me say "*some*" instead of "*sour*" soils.

I wish I could feel deserving the rare compliment of your esteemed correspondent, in ascribing to my crude remarks the discovery of a "thorough acquaintance with the subject." Profoundly impressed with such appreciation from so intelligent a body of farmers, I hope whatever of vanity it may engender, may be balanced by a corresponding impulse to a more laborious study of a subject so abstruse, and so important. Through the ignorance or carelessness of all the old, and even of later writers, except, perhaps, two of the latter, it has been treated so utterly without method, or terms of definite meaning, that with all the light I have found in their rambling essays added to my own experience, it is difficult, and often in apparent defiance of the best established works on the subject, to reach definite conclusions, and more so to convey these to others in language of certainty. Every science, except that of agricultural chemistry, has its language. This, especially, in reference to lime and other mineral compounds, is arrayed in a thousand loose idioms, at the caprice of various authors; none of whom seem to have recognized any superior or precedent, or even observed any uniform certainty in their own expression.

Of those who have written especially on lime, so far as I have examined, the late Edmund Ruffin, of Va., is the only exception to this complaint. He found no settled opinions, nor any definite language conveying the discordant notions of his predecessors. Very justly recognizing no superior, he adopted a language of *certainty* to convey his opinions. However perfect this in itself—in connection with the rest, it only adds another drawer to Pandora's box. So still the learning on *lime* is as void of definite language as John Smith of a name.

To prevent erroneous impressions from my own imperfect expressions at the meeting of the club, referred to as reported, I trouble you with this. I appear to have said: "the finely powdered stone is of equal effect with the calcined," whereas, I intended to say that "if pure limestone could, by mechanical means, be reduced as fine, as by heat, its effects in the soil would be the same in kind, and ultimately, in degree, as the burned lime. But the action of fresh-burned lime on sour soils might be more vigorous for a short time; producing the same results in decomposition of other substances in a shorter period, as fire decomposes wood more rapidly than the oxygen in the temperature of the atmosphere." This, however, was only incidental, by way of illustration. The argument was in reply to a request from the foreman to give my

opinion as to the proper condition in which to apply lime. It was directed against the ruinous and inexcusable practice I found prevailing, and stoutly defended, among that otherwise very intelligent body of farmers, of piling unslaked, or hurrying even fresh-slaked lime on the fields to save supposed benefits peculiar to its most caustic state, and for other equally groundless reasons.

I was put to the utmost concentration, in a few moments of impromptu talk, to present the fallacy of the deeply-rooted opinions of those who had used more lime than I ever had; and used it with apparent success, even in the wrong way. I, therefore, may have not been fully understood.

I urged that it would not, by mere exposure to the atmosphere, ever lose its alkalinity or all its caustic properties. That after a certain amount of carbonic acid is absorbed, which, alone, deprives it of caustic properties, in the air, the affinity of the lime for the acid and water becomes equal, and the further approach to the pure carbonate of the stone, under these conditions, ceases forever.

But if I am mistaken in this, and it should turn to the original rock, as is imagined by some speculative writers, who are stuffed with more learning than brains, if it should be applied even after the lapse of two thousand years, in an *impalpable state of fineness*, as in spontaneously-slaked lime, the same beneficial results would follow, as from a like quantity, in the same fine condition, one hour, one day, or one month old, and none of the evils.

I now say I would prefer the old, for reasons I cannot now detail, but which may be made public hereafter. A comprehensive answer is given to this question in these words: it should be as *fine as possible, and evenly disseminated on the soil*.

How a truth so obvious to an intelligent view of the subject, could have been so muddled during over two thousand years of its known use as a manure is beyond comprehension. Assuming that no farmer who has ever exposed his stone lime in small heaps on the field, will deny that heavy rains will chill it into hard granular lumps, instead of reducing it to fine powder, as it falls in spontaneously slaking under shelter, I will present an argument against its exposure, that I think will overbalance all the supposed economy of this ruinous practice.

The washing by heavy rains is the cause of more loss of lime from the soil than all other causes. Nothing arrests this, but the chemical combination of the lime with the body of the soil and plants. Moreover, until combined with other substances in the soil, no plant can assimilate it. As long as lime exists in a free state, or combined only with carbonic acid and water, on or in the soil, it is liable to be washed away by heavy rains. Lumps of lime, in this state, from the size of a marble to a pin's head, or grains of sand, cannot, chemically, combine with the soil or the plants, and are, therefore, at the mercy of the rains and floods. Why will they not combine with the soil or plants as readily as fine lime? Simply because chemical union takes place only between finely divided atoms of matter. All else results in *mechanical mixture* only, which is liable to be broken up, and totally defeated by physical means.

Passing the essentiality of fineness, for solution in water, charged with carbonic acid for absorption by the plants, to the mode of *firing it in the soil*, I will repeat an explanation I have often made, by an example showing the *tendency to combine is in proportion to the amount of surface brought in actual contact*.

Lime, like other mineral substances, is acted on, and acts, only by its *surface in actual contact* with the matter to be acted on, or combined with. A lump of lime an inch cube presents a surface of six square inches. The same, reduced to impalpable powder, presents an active surface for chemical combination with the soil a *million times greater*. But, to illustrate, take a mineral substance, whose properties have not been beclouded by two thousand years of legendary education in the *wrong direction*; and which is governed by the same laws of decomposition, affinity and combination, as lime. A cubic inch of solid iron will refuse to combine with the oxygen of the atmosphere, or with the soil, though slowly oxidizing on its surface, for a thousand years. Reduce it to shavings, or more finely, to filings, and it will oxidize, (unite with oxygen, and turn to rust,) in a comparatively short time.

Reduce it by chemical means to impalpable powder, like well-slaked lime, and it will expose a million times more surface to the oxygen of the air, its arch enemy, as lime is to acids in the soil. In this condition, the fatal embrace takes place a million times sooner—in an instant these elements unite with such extraordinary avidity, that they take fire and burn into oxide. Thus, instead of waiting untold ages, a double decomposition is *instantly* produced, and what *was* iron and oxygen, is no longer either, but a compound substance, with properties differing from both, called oxide of iron. It is now ready to combine with the soil, and to enter into solution, and be assimilated as plant food. It is just as essential, too, as lime. No plant can live without it; nor could they support the animal body without it. Fortunately, sufficient oxide of iron for plants is found in our soils. And, unfortunately, sometimes too much. But suppose a deficiency were to be supplied: who would apply it in lumps, if it could be reduced to fineness as easily as lime? In England, its too abundant presence, in certain forms, kills the clover roots. The farmers decompose it with lime, and render it harmless and suitable for plant food. What would be thought of them to apply the lime in lumps or cakes? Yet daily, in our own impoverished country, we find farmers laying up treasures for their children in the shape of insoluble uncombinable lumps, to abide the chances of washing away. Moreover, a mere mechanical mixture of lime does not fertilize the soil as long as it remains in that condition. The lumps give off lime slowly in cultivation, and so do the rocks give off potash, lime, iron, magnesia, &c. The rocks, however, have the advantage of holding their positions against the floods that sweep away the lime. Yet I never heard of but one man, (and he is a professor and president of an agricultural and mechanical institute) advocate the leaving of rocks on the soil to fertilize it.

A farmer applies a hundred bushels of stone lime in little heaps, and the rains fall and chill it into lumps. These are scattered about. Of

course, for a long time he discovers no benefit, and indeed the soil is daily *deteriorating for want of it*, and he concludes it is *oerdoosed*; when, in fact, it is *not yet* availably limed at all. While he is waiting for the supposed overdose to be removed, or the soil to recover from it, by years of cultivation, a portion of what the floods have left, is ground by friction into powder (perhaps one-tenth, which would be at least twenty bushels of dust) and *combined* with the soil. So when he imagines it is beginning to *recover from excess*, the *soil is only beginning to taste the lime*.

I was told the other day, by an otherwise intelligent farmer, that he applied lime in the lumpy state to *prevent waste*; that it would give off fine lime fast enough for the use of plants, and be more permanent in its effects than if applied in fine powder. That is, he thought a *mixture* safer, more economical and permanent, than a *union* with the soil.

This, it is needless to say, momentarily chilled the ardency of desire to enlighten and elevate co-laborers in the soil; assailed my philosophy, and vanquished all my courage. If I stated my views as a fact within my own knowledge, it would be but one against many opposing witnesses; if I cited authority from other experimenters more worthy of respect, he could array ten thousand printed authorities against it, and in favor of his own views, which I know he could find from the press supporting this or any other notion that could possibly enter his head.

As well talk to tempests as against the press, that prints more folly in a minute than I can talk in a hundred years. Indeed, I had as well turn clergyman, and, with the sacred book under my arm, trudge on foot, vainly to arrest sin, that flies by steam and by electric sparks along the wires. Thus overwhelmed, I only faintly said—"the soil is a bad bank of deposit for *loose* change for ourselves or children, especially in these hard times." In my confusion I did not think to cite him to a more permanent investment, in Pacific Railway stocks and bonds, to which I now, through the talisman of the press, call the attention of all votaries of the fashion of investing surplus earnings in the drains, rivers and seas. I cannot close without saying for the encouragement of thorough organization of farmers' clubs, that the members of the Gunpowder Club, whilst to some extent they differ from my views, in their talk on that evening, discovered a higher appreciation of lime than I have ever heard from any association of farmers, and far less confusion than is found in the books.

Nor have I ever heard more correct views as to the best system of increasing the production of the soil. But the most cherished and unfading memory of that occasion, will ever be to me, the genial smiles of the host and hostess at the extremes of the long and bountiful table, who turned a stormy evening to sunshine in that grand old mansion; and of the *scions*, who, however they may have adorned the gay and fashionable circle, never could have graced the *festive service* without the genuine inspiration of a *Farmers' Club*.

Yours, very truly,

L. H. MCGINNIS.

Willow Grove, Shenandoah Co., Va., Dec. 1, 1873.

☛ Renew your Subscription promptly.

Will it Pay to Grow Merino Sheep in Maryland?

To the Editors of the American Farmer:

In passing through the State, one would think the citizens either thought not or that they did not care. I have in view a hilly farm that has been ploughed and cultivated for many years; tobacco and grain have succeeded grain; the soil is now barren and unproductive; the former improvements are now dilapidated; the family all complain of the scanty income; the boys long to get away to some other business; the girls find many objections to farm life; those barren hills, now seamed with great gullies, washed and worn by the annual rains. Dilapidation and woe present an unpleasant figure and tell you a change is wanted; and per request I will picture a change: Another has purchased the farm, and through his operations the former routine has been abandoned; 100 good healthy sheep have been purchased; these consist of 90 common strong ewes, procured near home at \$2.50 each, 4 Merino rams, and 6 ewes, sent for, at a cost of \$30 each; these are here collected and are well cared for; the wool is annually sold; the lambs are annually raised to increase the flock, and annually the culls are taken out and fed up until sold after shearing; the 3 year old wethers are treated the same way. Manure is made and applied to the land; some lime and plaster are annually bought to help; the washed places are stopped and filled up; less ground is ploughed, and this better tilled; more grass is grown; things are fixed up, and repairs are annually made; the yard is enlarged; trees are planted; green crops are turned under. The farm has in time become rich and beautiful, and the passing traveler, attracted, inquires what has made this change? An old citizen has come up the road and he is asked, and relates what has been done; he points to the now beautiful flock that has annually increased and added their help until their home is beautiful with the rich carpet of green.

Reader, think not this cannot be done. It has been, and ample proof thereof can be furnished. Will you now continue in the old way, or will you change? The size of your farm does not interfere; if small, then get fewer sheep; if larger, then get more. Change you must! The old way is out of date, and all must keep up with the times. Your common sheep will not do; you must improve them; the Merinos will alone make that improvement. You cannot call this mere fancy, gotten up by a citizen of a town or city; the writer has experienced all this; his farm and flock have been and are as represented, excepting some experimental deviations. Say not some lucrative business helped me to carry this out; the reverse is the case; I bought at a high price; I could only pay one-half down, the balance was on interest, and I had to then borrow to start with. Say not I made money in an outside business; I did borrow money for a side business, and lost it all! Yet the Merinos carried me through, and depend upon it, I will now confine my business to them and the farm.

Brownsville, Pa.

JOHN S. GOE.

Farmers' Clubs and Farmers' Papers.*Editors American Farmer:*

My Dear Friends.—Though I have not written for your valuable paper of late, I have not forgotten you, nor has my zeal in behalf of your valuable paper, and our common cause, in the least abated; but circumstances over which I could have no control, have sadly chilled my ability for indulgence in my favorite pleasure of writing for our honored craft, in behalf of which so much has already been written, and yet there remains so much more to say,—my part of which I yet fondly hope by the blessing of God humbly to do to the best of my ability.

Another year will have closed upon us and our efforts ere one more cheering visit can be made us from your ever-welcomed *American Farmer*, and it behooves us all, in full faith in our God and Great Creator, to calmly review the past and sensibly plan for the future. This should not be in mere idle words, but in resolute action, for we all have our part as individuals to perform, and if we will fully and faithfully to the very best of our ability (though poor it be) strive with energy our whole duty to discharge, great indeed must be its good, cheering and glorious results to our country and to ourselves.

The sad condition of our country seems a wild mystery to us all, and loudly appeals to every American patriot at once to come forth from his retirement, and faithfully apply his best efforts in every way he can to reinstate those good old times we all so well remember and so anxiously wish for again,—to fully accomplish which it behooves every saint and sinner, of every grade and class in our whole country, to resolve his part faithfully to perform for the general good of us all. My part is humbly to strive in behalf of our oppressed and depressed class, who are struggling to draw from our sadly-abused mother earth food and raiment for them all, upon the success of which all of every other class so entirely depend. The ministers of the gospel, the rulers and the would-be rulers of our country, the politicians and lawyers, and all other professions and classes, should be appealed to, to come forth and resolve faithfully to perform their part from the first day of January, 1874, up to the first day of January, 1875, to re-establish those good old honest and religious times so rudely wrenched from our happy land by the late unfortunate, cruel and wicked war. If all will so resolve and faithfully do their part, (remembering the 6th verse of the 12th chapter of Romans,) we may then fondly hope again to be as we once were,—a free, prosperous and a happy people,—without the great incubus and bitter bone of contention (slavery) to mar our brightening prospects in the brilliant future. It is true, the food and raiment for all others depend upon our craft; yet it is equally true, our craft greatly depends upon the true religion, honesty, temperance and energy of every other craft: for an increase of all which it becomes us all most zealously to pray and watch, and diligently struggle for our common good, and also remembering the injunction given us, "as much as possible to live peaceably with all men."

Soon, very soon, those then living will be called on to say that little word, *good-bye*, to the old year

1873; and what sad and unpleasant reminiscences does that little word too often recall to the human heart. When the wild winds are rudely blowing their chilly blasts around my little old log cabin, and too often find a fresh-made crack through which to apply their unwelcomed Æolian tunes upon my old rheumatic frame, fond memory brings to light the comforts of my lost home, when I so sadly said to its falling frame, *good-bye*. Then I deeply sigh. I can't help it; it is nature, and I am but mortal. Pardon me for this melancholy allusion to myself, and I will at once return to an effort at a discharge of my duty.

Our Belmont Club, in this county, is fast growing in numbers, influence and importance; other clubs are formed and being formed all over our county, and adhering to it as the fond mother of them all: from the influence and good effect of which we most fondly hope great good to flow to our struggling craft. My infirmities prevented my attending the two last meetings, and fearing I may not be able to attend our next, I to-day sent an article to each of our papers published in Charlottesville, calling upon and advising each and every member of all the clubs, and every and all other persons who had any interest in the success of agriculture, to subscribe alternately for the *American Farmer*, by Messrs. S. Sands & Son, of Baltimore, and the *Southern Planter and Farmer*, of Richmond, Va., and to write for each paper,—making them as our own. Out of the immense bulk from so many correspondents, the able editors of these two papers, vying with each other, could and would build up two such papers as we all so much need and every American be truly proud of. Such I fondly hope to live to see, and humbly help to make the *Southern Planter* and the *American Farmer*. A dollar is more difficult to get than I ever saw it, and I propose this alternate subscribing because our condition now absolutely requires us all thoroughly to practice what I have so often, so zealously, preached—rigid economy in everything; and whilst we may at first take a few from you to give to the *Southern Planter*, or a few from the *Planter* to give to you, the balance-sheet will be about the same, with a fond hope of adding hundreds to you both. If our scheme proves a good one, and other clubs and counties follow our good example, thousands should be added to you both; and with the large premiums arising from our very large subscriptions, we hope to help build up a valuable library for our club, from which we all can freely draw such a fund of useful practical information as will make us all better agriculturists and abler correspondents to your valuable papers. And by a large increase of subscribers from those who never subscribed before, we fondly hope to benefit ourselves and both of our pet papers. As one of the Belmont Club, I shall feel myself bound to write carefully, to the very best of my humble ability, one article for each No. of your valuable *American Farmer* for 1874, but shall not expect ever to see or hear of them again, as many if not all of mine must be justly doomed to the cast-away rubbish, under the pressure of so many and so much better articles, which I do so fondly hope will crowd out all of mine and all like unto them; as I do so earnestly hope all of our old friends,—Dr. James Smith, Mr. J. Marshal McCue, Mr. J. D. Bethune, Messrs. J. D. Thorne and Newton,

and F. A. Lewis, W. H. White, David Stewart, C. Harvey, W. D. Brackenridge, John Willis, Wm. Holman, J. Fitz, A. B. Davis, A. Jackson, J. J. Martin, M. G. Elzey, John Witherspoon, F. G. Ruffin, Matthew Harrison, L. E. Rice, Richard V. Gaines, Thomas Drew, David Dickson, Edw. B. Emory, G. C. Smith, A. W. Sweeney, and Mr. Hanson of New Orleans, and many others,—will trim their lamps and hie to the good work for 1874. Yours truly, GEO. C. GILMER.
Buckeyeland, near Charlottesville, Va., Dec. 8, 1873.

[We cordially tender our thanks to Mr. Gilmer, not only for his exertions in behalf of our journal, but also for his unceasing efforts to stir up the minds of the farmers of the South, to induce them to a greater diligence in securing a restoration of their time-honored commonwealths to their former high and prosperous condition. *Mind AND Muscle* are the requisites for the times, and with such men as are now putting their hands to the plow, with an earnestness never surpassed, as shown in the numerous ably-conducted journals of the South, and in addresses like those alluded to in this number, before agricultural societies, clubs and granges, appealing with all the energies of their souls to their brethren of the craft, to be up and doing, to redeem their several States from the terrible slough of despond in which they are now floundering, who can doubt the final success of their efforts! The *Press* is the great lever by which the world is moved and stirred up to action, and if the reading and reflecting farmers of the South would only strive to place a good agricultural paper in the hands of every man owning a rood of ground, our word for it the present drawbacks to prosperity would soon be gotten out of the way, and improvement would in a little while be evident to the eye of every observer. *Now* is the time for the good work to begin everywhere, and we hope the clubs and similar associations will take it up in good earnest, and scatter the good seed which we and others are furnishing, through agricultural journals, in every direction,—to bring forth fruit to the honor and prosperity of the whole land.—*Eds. A. F.*]

Potash Salts for Peach Orchards—The Early Beatrice Peach and the Curculio.

Messrs. Editors of American Farmer :

I hope you will excuse the delay in replying to your inquiries; it has been impossible for me to do so sooner, and I must be very brief now. The only German Salts that I have used is the Muriate of Potash, imported by Mr. Oudesluys; its effect on my orchards was entirely satisfactory, particularly so when combined with fine ground bone: six hundred pounds per acre of the latter with two hundred pounds of the former, applied separately; and the land harrowed immediately.

My experience, as to the proper depth for planting fruit trees is, that they should be set about two inches deeper than they stood in the nursery, so that when the earth settles about the tree, the roots may be at nearly the same depth as they were when the tree started its growth.

In regard to the *Horticulturist's* comment on the curculio and my Beatrice peach trees, I would say, I have only a few hundred trees of that variety that were two years old last spring; the rest all younger, so that I had no right to expect a single peach last season, as the trees were not well grown at that time; but in May, when I saw you, there were some forty or fifty peaches on the trees, and I did hope to ripen a sample to show you. That the curculio should destroy these few Beatrice peaches, the same season that they did thousands of bushels of ordinary varieties, on the same farm, I do not think should be taken as evidence of any particular love of the curculio for the Beatrice peach; or cause me to believe that it will be more injurious to this new peach than to our old varieties; on the contrary, I believe they are no more liable than other varieties to attacks from all insects, or to injury from frosts. The tree is a fine grower, and I feel confident that I have not made a mistake in planting so many of them.

Yours truly, EDWARD WILKINS.
Riverside, Md., Dec. 18th, 1873.

[The reference in the above communication from Col. Wilkins, who is the largest peach grower in this country, and as we suppose in the world, is to an "Editorial Note" in the *Horticulturist* for November, to which we directed his attention. Basing its remark upon an extract from a letter of Col. W., published in the *Farmer* several months ago, the *Horticulturist* said, as though it were an unusual thing for the peach to be so attacked, "It is now discovered that this new variety of peach (Early Beatrice) concerning which fruit-growers anticipated rich prospects, is considerably injured by the curculio. Col. Wilkins, of Kent Co., Md., says all his have fallen from the sting of the curculio." It will be seen that that gentleman repudiates the idea that this new favorite will suffer any more in this way than our older sorts; and it may not be out of place here to repeat, what we have already noticed in our pages, that having satisfied himself of the merits of this peach by fruiting it under glass and by examining it on the grounds of Mr. Bilyew, of Halifax Co., N. C., who was the first to introduce and grow it largely in this country, so well satisfied was he of its value, that Col. Wilkins last spring planted out an orchard of 15,000 trees of this single variety.—*Eds. A. F.*]

How Deep shall we Set Peach Trees?

Messrs. Editors American Farmer :

As your correspondent, L. W. G., has given the public through the medium of the *Farmer*, some new ideas about setting peach trees, and as you

have invited discussion on the subject, allow me to express briefly a few of my views in the premises.

This deep planting, as practiced by your correspondent, we all know is at variance with the best authors on the subject. Our practice is, and we believe it is also that of most orchardists, to plant trees as deep, or an inch or so deeper, than they stood in the nursery; but I admit that modifications are allowable. In stiff soils they should never be set deeper than they grew before transplanting. In very light sandy soils, in order to secure moisture and maintain perpendicularity without staking, which seldom should be practiced, we would set a few inches deeper. We would never, under any circumstances, set trees deeper than from four to six inches lower than they grew in the nursery, and only that deep in very light sandy land.

As L. G. W. planted his trees in a *sandy gully*, of course in elevated or rolling land, cultivated the soil and made a bank just below each tree to catch the soil brought down by the rains, he attained two important objects, viz: *moisture and fertility*. The years 1871 and 1872 were, as he observed, very dry, and this accumulation of soil and moisture was, under the circumstances, the very thing for the trees. In fact no better mulching and manuring could be desired. The writer can corroborate this idea of mulching with earth from his own experience. During the winter of 1871 we dug a cellar for an apple house in the midst of our young orchard. On the north and south sides, a few feet distant from the excavation, stood a May-Duke cherry and a peach tree, both set the year before. The sub-soil from this cellar was thrown around these trees to the depth of 15 or 20 inches, but in a funnel shape around the stem instead of a hillock as was the mode practiced by L. W. G. These trees flourished and grew finely, whilst their neighbors were almost dying with thirst, and by the fall they were at least twice as large and as heavy as any other trees of the same age. Now we suppose that an accumulation of poor sub-soil, for no "*fattening muck*" was there, acted in this case simply as a *mulch*, and the advantage derived was solely from this cause, as the *moisture retained* was sufficient for growth during the whole season, whilst the trees around were actually perishing for the want of it.

The washings of the soil into L. W. G.'s gully was a gradual operation and was an advantage that our two trees did not get, although, I omitted to say, there was a good deal of argillaceous slate mixed with the sub-soil, which might have had something to do with the extra health and growth of our two trees.

It is the practice in some of the very light and sandy portions of California to plant corn six inches deep; but what would become of it if put that deep in our stiff clayey soils?

The experiment in deep and shallow planting which L. W. G. has made or intends making, will be rather an unfair one, as he speaks of setting trees in holes twelve inches in diameter, which no horticulturist would do with the expectation of raising a healthy or thrifty tree.

J. FITZ.

Kenrick Depot, Albemarle Co., Va., Dec., 1873.

Deep Planting of Peach Trees.

To the Editors of the American Farmer:

Your correspondent L. W. G. is the deepest man I ever heard of, at least so far as tree planting is concerned. I have no time or taste to indulge in controversy about this, or any other matter, but will submit a simple proposition to him. If he will plant an orchard of one hundred acres, in peach trees, placing each tree in holes twelve inches in diameter, and put the roots at least (as he says) two feet below the surface of the ground, I will agree to pay to him one dollar a piece for each peach of the first crop, if he will agree to pay me one dollar for each tree that dies;—you to furnish him with my name and address, when he assures you that he is ready to plant an orchard in this way.

I would myself as soon expect to gather black Hamburg grapes from a white-oak gate post, as fruit from peach trees thus planted. PETER.

Foreign Correspondence.

AGRICULTURE IN FRANCE.

Fallow Lands—Farm Labor—Co-operative Plans—The Dairy Business—Growing Sugar Beets—The Phylloxera, &c.

PARIS, FRANCE, November 20, 1873.

Messrs. Editors of the American Farmer:

It may seem strange to many to be informed, that the agricultural world in France is organizing a crusade against the reprehensible practice of allowing lands to lie in fallow. The evil is more general than might be supposed, and is limited to no particular district; if it does not progress, neither does it retrograde; perhaps we are about where Young found us. This state of things is not creditable; the system does not enrich the soil, but impoverishes the farmer, and yet it exists despite the lessons of science, conclusive examples, and against even the good sense of those who adopt it. In other respects, the agriculture of France has made rapid strides in the way of progress. The obstinate adherence to the triennial rotation, two grain crops succeeding a year's fallow, is attributed to deficiency of capital, which does not allow of the farmer maintaining stock, that is, to have a supply of manure; to the proprietors who consider their interest to lie in the cultivator not taking as much as he can judiciously from the soil, but in his not using out the land; to leases which stipulate that a fallow shall be adopted; but perhaps the principal cause may be traced to routine. According to reliable calculation, the fallow system entails a loss of fr.75 per acre; and per contra, were this sum expended on manures alone, there would be a net gain of fr.90 per acre, instead of a loss. Market gardening is the essence of the rotation principle; plants there are alternated with judgment, and are well manured. What would such a cultivator think if he were advised to leave a plot untilled for a twelve month? Naturally he would laugh, and why? Because he is aware manures repair all breaches made in the fertility of his allotment. A copious feast secures more true repose for the

soil than a year's sleep. However, since farmers feel foreign competition excludes them from the wool and grain markets, and that the price of meat is chronically on the increase, the necessity of cultivating forage and root crops is producing converts, by that most eloquent and mildest of reasons, to which we all submit—self-interest.

FARM LABORERS.

The political agitations which ebb and flow like the tide, and unhappily nearly as regularly, are telling on the position of the agricultural laborers, not only by compelling the farmers to practice economy, but rendering manufacturing operations so insecure that no work can be found in the towns. In the centre of France, where the farm laborer is best paid, his wages during the winter or "short months," are about fr.46, or equal to one franc and three-quarters per day. Supposing he has a wife and two children; the consumption of bread for the family may be estimated at six pounds daily, which at the price of one franc per four pounds, nearly absorbs all he earns. Farm servants in France are engaged at two seasons of the year—St. John's day and All Saints; the former is the more important, as the wages paid for the period of four months, are about the same as are given for the remaining eight. On the two holidays in question, the boys and girls assemble in the market squares of the various towns to be hired; the young women carry a bouquet in their corsage, and the lads a ribbon in a button-hole of their coats, to indicate they are open to every eligible offer. Now the first of this month the offers were exceptionally superior to the demands; fathers, suspecting hard times to be coming, recommended those of their children who were suitable, to relieve the hive, by seeking employment. Unfortunately, on the other side, the farmer had made his calculations in a similar spirit. For simple John Hodge, the worst of governments is that under which he suffers hunger and can procure no work.

CO-OPERATIVE SYSTEM OF FARMING.

Why cannot capital be as easily invested in working a farm as in carrying on a factory? It is said the inability to clearly draft a deed of partnership, the impossibility of conducting a simple and intelligent system of book-keeping, by which the capitalist can comprehend at a glance how the money goes, are the chief obstacles. The success, after six years trial, obtained by M. de Saint Projet, in his plan of applying the principle of co-operation to the *metayage* system, merits attentive consideration. In the south, west, and centre of France, is comprised the *Metayage* region; that is to say, where the landed proprietor contributes more or less of the stock, and shares the produce with the cultivator. For proprietors whose occupations or tastes prevent them living near their lands, the *Metayage* plan possesses serious drawbacks; to ameliorate it would include a social as well as an agricultural benefit. Co-operation, so far as farming is concerned, is but a new name for an old custom. M. de Saint Projet allotted three different portions of his estate, to what are called as many "colonies," or groups of families; in this case each family consisted of four able-bodied, intelligent men, their wives and children. A deed was drawn up wherein he guaranteed fixed remuneration in

money or in kind, and a share in net profits. He supplied them with the capital to purchase their share of the stock, charging them five per cent. interest; the advance has been repaid during the fourth year in cash, and the value of the live and dead stock enhanced for mutual benefit. Where formerly such families but vegetated, they now live; having experienced the attraction of acquired property, the taste to add to it has been developed. Where there was want, plenty now reigns; and if the families so desire, they can realize the wish of Henri IV., to see a fowl in the pot every Sunday. Instead of dreaming of immigration to the town, the families have become more attached to the country; marriages have been contracted as prosperity increased, and happiness was only augmented the more they became fruitful.

THE MILK BUSINESS.

Thirty years ago the milk daily supplied to Paris arrived from a distance of thirty miles; to-day milk for the capital is transported over an average distance of ninety miles, and a little as far as 120 miles. The city consumes about one quarter of a million quarts of milk daily, which is retailed at six sous the quart, having been purchased originally but for two. The unsold milk is made into white cheese, more or less rich: clouted cream, in a word. The milk is forwarded to Paris every night by train, and is a mixture of the morning's with the evening's milking. To preserve the former fresh for twelve hours, it is placed in special vessels which are plunged into a water bath, and heated to 206 degrees, even under the boiling point; the vessels are then taken out, plunged in cold spring water till the afternoon, when the contents are mixed in common with the evening's milk in an immense tub, with a strainer inside, and then rapidly run off into the cans, which are at once covered down, tied, sealed to prevent fraud, and in this state reach Paris at two in the morning. The wholesale dairyman's profit is about one centime (less than a farthing) per quart, and the average expenses of collecting and transporting the milk is nearly equal to its prime cost. In Switzerland, farmers are making fortunes by selling milk to the various "condensing" companies, and Danish agriculturists are likely to find a market for fresh butter in tins.

GROWING SUGAR BEETS.

One of the oldest and most important beet factories in France, is that of Bourdon, at Montfermeil. It works up 360 tons of beet in the day, which is purchased at the rate of fr.16 per ton, the pulp being sold at fr.12. The yield of sugar varies from 5 to 54 per cent. Upwards of 22 tons of molasses are daily distilled, 200 lbs. of which yield 25 quarts of alcohol, and the residue, when evaporated, produce from 10 to 17 per cent. of potash. The country round is very rich, more fertile than the "black lands" of Russia; manure is rarely employed, the farmers alleging it makes no difference in the yield; wheat and beet is the rotation followed; the wheat is peculiarly rich in gluten, and is in request for making macaroni. The return of beet is 20 tons to the acre, and the rent of the latter varies from 70 to 120 frs. The factory only employs oxen for draught purposes, of which 500 are in request; half that number being annually fattened for the market.

FERTILIZERS, SALT, &c.

Much attention is being directed to guano and chemical manures, with the view of escaping imposition. Intermediary dealers in commercial manures are rapidly disappearing, as farmers are purchasing directly at the genuine depots. The feeling is spreading that the production of beef and mutton must be the sheet-anchors henceforth for French farmers. There is an increase in efforts for the breeding and rearing of horses of a useful, rather than an ornamental kind. The additional tax on salt vexes farmers, who employ a good deal of it rather as an appetizer for stock than as a tonic for the soil, and, although a philosopher considers salt detrimental to vegetation, because it killed off some of his kidney beans in a flower pot, agriculturists accustomed to employ it as a stimulant, will not be easily frightened into giving it up.

THE PHYLLOXERA.

The Phylloxera continues its ravages on the vine; it is monarch of all it surveys; its power can be measured by the ruin which it causes. The sulphuret of carbon has been voted a remedy worse than the disease, and it is proposed to regenerate French vineyards by acclimatizing stocks from the *vulpina* American vine. M. Planchon has returned from the States with specimens of an acarus, having the property of pursuing, killing and eating the Phylloxera. The little strangers are doubly welcome, and if they do their work, we will bring them across the Atlantic as first class passengers, and along French railways in sleeping cars. F. C.

The Crops in Europe.

Messrs. Editors American Farmer:

As the surest way to give you information of our crops, I copy an agricultural report, published in one of our ablest agricultural papers. There is no fear that that paper has any interest to hide the truth.

The conditions of the crops as estimated are following: oil crops good, quality very good; wheat, average crop, quality below middling; rye, universally insufficient, quality below the standard; barley, more than an average crop, quality of little value; oats, very rich, quality satisfactory; legumes, little and of bad quality; tobacco good, quality good; hops below middling, quality good; potatoes good.

Speaking about crops in different European countries, the harvest is, in Germany, an average one all together, only rye insufficient, a great supply of which from Russia is wanted and expected; other crops, especially wheat, more than the necessary supply. In Austria-Hungary: wheat, very little for export; rye, a great quantity is to be imported. The same in Roumania, Servia and Turkey. Russia has for export great quantities of wheat and rye. Italy has just enough for home consumption. Switzerland has, as usual, a great want of all crops. France has to import great quantities of wheat and rye. Belgium and Holland have wheat enough for home consumption, but want a great deal of rye. England and Spain want considerable quantities of wheat. As rye is the principal species of corn in Europe, prices are expected to keep up pretty high, and Russia will be likely the only source to fill up the want.

Wheat is expected from America, and very likely in so large quantities, that England, France and Switzerland can be fully provided. For Germany, it is our opinion, exorbitant high prices can not take place, since wheat, oats and potatoes compensate partially the want of rye.

Prices of crops are at present higher than usual. At Berlin, the principal grain market in Germany, wheat stands from 74-93 Prussian thalers; rye stands 63-72 do.; barley 58-73 do.; oats 51-59 do. per 2,000 pounds or 1,000 kilograms. We expect shortly from our agricultural ministry a report and comparison about crops within the State of Prussia. All the agricultural societies in every county are required to give by the first of November a report of the harvest within their limits. All these reports are collected by the agricultural ministry, and then the average produce of every province is published. As soon as I have at hand this report, I will send it to you. These reports given in figures, whereby 10 represents an average crop, are given merely upon conjecture; about the 15th of March, next year, when most of the thrashing is done, more accurate reports are collected. Since about ten years, thrashing machines are in use more than before; but the most thrashing is yet done by hand, to engage our working class. We generally give the fourteenth or sixteenth part of grain to thrashers. American mowing machines are in great use, since a rapid emigration to America takes away many hands; wages are getting higher every year, so that farming is not so lucrative as it used to be. I will send you shortly a treatise on our agriculture, but I am of the opinion, that conditions in our country are of little value and of little interest to American farmers, and to make proposals to farmers in America in managing their farms would appear intruding, since a good sense in American farmers will teach them to do their own things best. My only call to American farmers is, and always will be: prepare your own manure, and as much and as rich as possible. Yours, very respectfully,

E. WENIG.

Neudorf bei Schonlanke, Prussia, Dec. 3, 1873.

[We are always glad to hear from our intelligent German correspondent, and though the system of agriculture pursued around him differs greatly from ours, his letters are read with interest, as showing the processes employed in so old an agricultural country.

Our advices as to the European crops mainly coincide with his reports, except so far as Russia is concerned, though doubtless he speaks of *central* Russia, whilst in the *south* the crops are almost a total failure. This was shown in our Nov. issue, and is confirmed by later advices. It is now stated, indeed, by eye-witnesses, that the condition of affairs there is so lamentable, that nine-tenths of the people will be in a starving condition, unless aid is rendered them, and that 8,000,000 roubles (about \$6,000,000) will be required to provide food for the destitute peasantry. This lessening of the supplies from Russia will doubtless increase the demand upon the United States for her breadstuffs.—*Eds. A. F.*]

Live Stock.

The Short-Horn Breeders' Association.

The annual meeting was held, as announced, in the first week of Dec., at Cincinnati. A number of subjects were discussed, some of which we may hereafter allude to more in detail.

A paper was read by Dr. L. B. Sprague, of Springfield, Ohio, on the "Conformation, Contour and Quality of Short-Horns," which elicited an animated discussion as to the quality of the flesh of whites, reds and roans. Dark reds were universally reprobated, as were hog-haired whites, but soft-haired yellow reds and soft-haired whites and roans seemed to be the favorites in the discussion.

Prof. Miles, of the State Agricultural College of Michigan, delivered a lecture on in-and-in breeding, in which he took the ground that desirable characteristics in cattle were never produced by breeding, but by favorable surroundings, altered habits, &c. Breeding only perpetuates the characteristics and transmits them. No novice can be successful in close breeding, on account of the dangers of sterility and small bony structure. A variety of opinions were advanced by the members upon the subject, but a majority of them opposed in-and-in breeding.

Dr. Stevenson, the President, read a paper on the value of short-horns as milkers, and by figures he attempted to show that with milk at 20 cts. a gallon, the short-horn giving two gallons a day, would nett the owner \$150 a year; comparisons were made to prove the great worth of the short-horns in these respects. A paper by A. S. Matthews, on the "New York Mills' Sales," was read by the Secretary and elicited much discussion as to whether it should be printed in the proceedings or not. The paper endeavored to prove that prices paid for Duchesses at that sale were out of all proportion to the value of the animals. The convention, by vote of 232 to 20, determined not to publish the paper, and not to give it to agricultural papers asking for it for publication. Mr. George M. Bedford, of Paris, Kentucky, offered a resolution that all animals entered in the *American Herd Book* shall be traced back through both sides to imported animals. Mr. L. F. Allen, editor of the *American Herd Book*, replied at length, showing up the pedigree of some boasted stock as catalogued in the *English Herd Book*. The question of the purity of the importation of 1817 was brought into dispute, and nearly all the Kentuckians present bore testimony to its purity and value. The resolution had many defenders, and many strenuous opponents, who stated that if it should allow the importation of 1817 to go into the *Herd Book*, it would shut out many thoroughbred short-horns, or animals received and certified to as such. Mr. David Christie, of Canada, made a long protest against the resolution. Lucius Desha, of Kentucky, offered an amendment, that the importation of 1817 be admitted to the *Herd Book* as pure short horns. This amendment was voted down. The word "shall" in the original resolution was changed to "should," and the resolution passed. Mr. Allen, in a long and vigorous protest

after the resolution was passed, affirmed that it would strike out of the *Herd Book* two-thirds of the entries there. This resolution was afterwards reconsidered and by a close vote laid on the table, so that the whole subject remains as it was—unsettled.

Stabling.—Dr. G. B. Loring, in Murray's book, "The Perfect Horse," says: that the folly of bad feeding is no greater than the folly of bad stabling. The practice of providing warm and tightly-built stables for young colts is as injurious to them as forcing their growth by heavy feed. A colt requires fresh air; and, if he is furnished with an opportunity, he will be sure to get it. His lungs are the largest part of his internal organs; and he will provide for them, if there is any way to do it. Give him the best and the warmest box in the world, and he will leave it for the invigorating influences of the northern blasts in winter, and for the cooling and indurating effects of a coating of snow and hail. He seems to understand by instinct, that if he confines himself to the hot air of an elaborate, well-finished, model stable, his energies will wilt and fade. He seems to know that a glossy, shining coat is to him sort of a white wall of a whited sepulchre,—pleasing without, but within full of all equine disabilities; and so he only asks for room to stretch his growing limbs, and a roof sufficient to shield him from the storm, undisturbed if he should see a star through the crevice above him, and feel the fresh breeze whistling through a crack by his side. He wants a well-ventilated stable, and a chance to get out of it whenever he has a desire to do so. And, above all things, let him stand on the ground, if possible, while in his box; and, at any rate, in a yard into which his box opens. A floor, especially a wooden floor, is bad enough for a mature working-horse; but to a colt it is almost destruction. I have no shadow of doubt that we ruin thousands of horses' feet in this country by our plank-floors. The wood, when dry, is a non-conductor of heat, and tends to keep the hoof above its natural temperature, and to remove from it all its natural moisture; and, when wet, it has a tendency to rise above the surrounding temperature by fermentation. Wet or dry, therefore, wood, whether in the form of a plank-floor or of sawdust bedding, is very injurious to the horse's foot. And so thoroughly convinced of this am I, that I always provide brick floors for all that portion of the stall which is occupied by the horse's fore-feet,—a practice which has, with the aid of tar-ointment, protected me, for more than twenty years of hard driving on hard roads, from sore-toed horses, and has sent out of my stables a foot which every farrier in town recognizes the instant he puts his butterice into it. For the feet, then, of the colt and the idle horse, furnish the earth as a standing place: for the feet of the working-horse, furnish a brick or stone floor. By such a floor alone can you secure to your colt a good foot; and, in this way alone, moreover, can you be sure of giving him a good leg, a well-shaped ankle, and a firm and substantial knee. I know not how it is, but the misshapen ankles and shaky knees which come out of hot stables with wooden floors among the colts which have wintered there, constitute one of the pecu-

liar phenomena of the business of rearing these animals. But so it is; and I urge upon you all, whether you like horses or not, whether you fear or trust them, to give them the solid ground to stand on, whenever it is practicable, in their youth, and any thing but wood in their days of maturity and toil.

How to Use a Ram.—A correspondent of the *Live Stock Journal* gives the following advice on breeding sheep: Where the breeder makes a business of selling lambs to the butcher, the earlier the lambs are dropped, the more valuable they are. In such a case, the object of the breeder is (or should be,) to have the lambs strong, vigorous and healthy, so that they will need scarcely any looking after, but will be on their feet in a few minutes after being dropped, and grow right along until ready for market. This matter is almost entirely under the control of the breeder, and depends principally on the ram and his management. He should be short-legged, square-built, with a vigorous constitution, free from any vital defect, a hearty eater and willing to stand up for himself—i. e., a good fighter. Some object to this last requisite; but other things being equal, the lambs of a fighting ram will be found to be heartier and livelier than those got by a ram that is easily driven.

No ram of less than two years should be used to any considerable number of ewes. The get of a younger ram are sometimes weak when first dropped.

The ewes should be put into a pen or stable once or twice a day, and the ram let in among them. He will soon learn to hunt a flock over thoroughly for ewes that are in heat. Only one leap should be allowed; as much care being taken in this respect as is taken by the owner of a thorough-bred horse or bull. Four or five ewes are as many as the ram should be allowed to serve in one day. Probably less would be better, although I have never detected any difference between the lambs in either case.

As soon as the ewe is served, let her be put out and kept out for at least twenty-four hours. Those who have their ewes numbered can register the time that each ewe is served, so that she can be cared for at the proper time of dropping her lamb—about five months after service.

The ram should be fed all the oats he will eat, twice a day, while he is being used, and should be kept in a yard or field by himself when not in use.

This manner of using a ram may seem too particular to some who have never tried it, but if closely followed, the breeder can usually depend on having his lambs come strong and healthy.

Cure for Kidney-Worm and Mange.—A correspondent of the *American Farm Journal* thus gives his experience in treating kidney-worm, and mange, in hogs:—

I noticed that one of my hogs, a large Chester white sow, was a little weak in the back. On examining her, I found that it was with great difficulty she raised her fore feet in trying to walk. As I have had very little experience in raising hogs, I at once consulted a number of

my neighbors. They all pronounced it kidney-worm, and, of course, each had a remedy. Some prescribed soap-suds; some, weak lye, copperas, blue vitriol, turpentine, etc. I gave each a fair trial, with no good result; and on the 20th of March she laid flat on her side, unable to turn over, and had not been on her feet for more than ten days, when a veterinary surgeon handed me a bottle of carbolic acid, and told me to use it as follows:—Ten drops, once a day, in drink; then put thirty drops in one gill of hot vinegar, and bathe the back over the kidneys once a day.

I gave her the first dose on Thursday, March 21st. On Sunday, the 24th, when I went out to feed her, she raised to her feet, and took two or three steps to meet me. By Saturday, the 30th, she was well and sound as ever.

The same remedy is equally good in treating the mange. First, wash the hog well with soap-suds; then, to one pint of lard, while hot, add an ounce of carbolic acid, stirring it until it is cold. Rub the hog two or three times with this, and give yourself no uneasiness about the mange.

CHESTER PIGS.—This breed of hogs was formerly held in high repute, for the genuine article is no doubt one of the best of the swinish fraternity; but of late years, the demand for them has decreased very materially, and *Pa. Journal of the Farm* gives as the reason for the declension that "it results from an almost indiscriminate shipment of all kinds of *white* pigs in Chester Co. When the demand was at its highest point, dealers were scouring the county, and buying up any kind of pigs so they had no black hair, and shipping them abroad to the disappointment of purchasers, and discredit of the Chester Whites. They can scarcely be claimed to be a distinct breed, but are only the result of many years careful crossing, and not having their characteristics fixed, show a strong tendency to revert to their original state."

SALE OF DEVONS.—Mr. S. T. C. Brown recently sold from his Patterson Herd, to Genl. W. H. F. Lee, King William Co., Va., one bull and six heifer calves.

THE \$40,600 Cow.—It appears that the agent who bought for Mr. Davies, of England, the short-horn cow *Eighth Duchess of Geneva*, at the New York Mills sale, for \$40,600, exceeded his instructions, and that she will remain in the United States, having been sold over on Mr. D.'s account to Col. L. G. Morris, of Fordham, N. Y., the price paid being \$30,600.

ANOTHER LOSS BY DOGS.—Col. J. Stricker Jenkins recently informed us that in September his flock, though in an enclosed yard, was attacked by dogs and a number of his finest sheep destroyed, including about half of his imported stock.

MR. COFFIN'S MUIRKIRK HERD has had added to it 10 calves, 3 bulls and 7 cows, the get of Royal Briton.

THE EDITOR OF THE AMERICAN HERD BOOK announces that entries of cows for the 13th volume will be received until Feb'y. 10.

The Vineyard.

Growing the Catawba Grape Successfully.

At a late meeting of the Cincinnati Horticultural Society, Mr. Gottlieb Myer exhibited a number of very fine Grapes, including a seedling of medium, compact bunch; berries smaller than the Catawba, but of brighter color; flavor, fine.—The Catawba Grapes shown by him were remarkable for the size of the bunches and the perfect condition of the fruit, and were said to be the finest specimens of that variety ever exhibited there. Some of the bunches weighed fourteen ounces, and measured six inches in length and five across the shoulder. This, too, when there was scarce a bunch of perfect Catawbas in the surrounding country.

The fruit committee examined Mr. Myer's grapes and obtained from him the secret of his production of such fine specimens. It appears that he has been experimenting for a number of years with this variety, and has now settled upon a plan for securing them against the attacks of disease and insects. His invention consists in covering the bunches with ordinary brown paper. This is cut in squares, six to ten inches each way, one of which, before the season for damage by insects or disease arrives, he binds over the shoulder of each bunch and down its sides, leaving the lower end open. He says several kinds of insects infest the grape during its growth, and that their effects were sometimes ascribed to disease, but that his covering was effectual against them as well as against mildew, rot, &c., which it would seem are produced by atmospheric causes. The committee was shown grapes grown without the covering immediately alongside of those covered. Those not protected were poor, ragged and deformed, with from three to six or eight berries to the bunch, whilst the others had fifty berries, full and perfect, and covered with a beautiful bloom.

Mr. Myer claims that at a very light cost every family may have at least enough Catawbas for home use, whether for the table or for wine, as well as other delicious grapes which are now useless from the attacks of insects or disease.—The great size of the bunches he showed was not to be attributed, however, to the covering of the fruit, but to his system of pruning, by which he produces such fine results.

Mr. Myer is an old gentleman of nearly 80 years, and has been many years engaged in grape culture, having been one of the earliest German settlers near Cincinnati.

PROFIT IN GRAPE GROWING.—A correspondent of the Agricultural Department planted 1,000 vines, about three miles from Washington, in the spring of 1866—one-half Concorda, the others of various kinds. The third year he built a trellis, trained the vines, and allowed some to bear fifteen pounds each. All the fruit was sold that fall at fifteen cents per pound on the vine. The crop of last season, which was the fifth, although the average price was only about half that of the first one, netted him \$700 per acre.

The Vegetable Garden—January.

Here this month is generally rather given to preparation, than to the performance of any actual work in the garden, though our southern readers are doubtless beginning to plant, it being considered safe to put out the hardy vegetables whenever the soil is dry enough and the temperature of the air will not fall much below an average of 45°. In this class may be included beets, carrots, cabbage, onions, parsnips, peas, radishes, spinach, turnips, &c.

Manure.—The getting together of materials for this is work that is always seasonable, and litter, leaves, muck, &c., may be advantageously mixed with the stable manure to increase its bulk; of all fertilizing materials for use in the vegetable garden, it is doubtful whether any surpasses in effect that which is largely composed of such materials as named and others of vegetable origin. Mineral manures, guano, &c., will stimulate and cause early maturity of products, but good compost, well rotted, gives more permanent fertility, and seems more congenial to the crops grown in the garden.

Hot-Beds should be prepared for use, glass mended, soil made ready, mats and shutters put in order and sash painted. The time to start them varies of course with the locality, the rule generally adopted being to sow the seed six or seven weeks before the usual time of setting out the plants, though tomatoes may be given an earlier start than this.

Tools.—Put these in order before they are needed; replace broken parts, sharpen hoes and spades, and see that you have everything ready for work when it begins.

Seeds.—Examine your stock of these. Do not trust any that are uncertain as to age or variety. Prepare your lists of such as are to be purchased from the seedsman, and send for them early. By postponing this until the planting season is about to open you join in the rush, and are liable to mistakes at a time when they are difficult to be remedied. By procuring your supplies early you have the opportunity also of testing your seeds, which it is well always to do. Stick to approved varieties for your main crop. If you wish to try new things, do it on a small scale first, giving the wider breadth to kinds found adapted to your section and climate. The difference in the estimate of the value of novelties is seen in the reports of the various *Tomatoes*, newly introduced as candidates for public favor. The Messrs. Landreth say, they purchased and tried two kinds of these, and that on the 20th August one of them had not a ripe fruit on the vine, and the other had not even set a fruit; while Mr. Vick says the "Arlington" was not worthy of introduction, and that the "Canada Victor," advertised last year as very early, he had previously tried, and considered without merit. The "Trophy" seems to maintain its character for size and solidity and is popular though coming late.

LAYING OUT A GARDEN.—If circumstances require the making of a new garden, it will be found much more convenient, instead of the old plan of several small beds—to be dug by spade and cultivated with the hoe—to make a truck patch, where the rows may be long enough to admit of horse cultivation.

The Poultry Yard.

Poultry as Farm Stock.

How many farmers might obtain plenty of new accommodations for poultry by simply making use of the buildings they already possess, and how many farmers consider fowls unworthy of consideration, because of some supposed difficulty or expense in erecting suitable houses.

And worse than this, how many farmers try to make poultry pay without any result beyond continual vexations, merely from lack of ingenuity in bringing ordinary appliances into play. "Why bother," they ask, "about raising chickens in cow-sheds and out-buildings, when you can set out as many coops as you like on the grass of a paddock, the gravel of a stable-yard, or upon the scattered rick-yard straw?" Because, generally speaking, half your chickens die under the common farm-yard treatment. They get wet feet and die of cramp; they drink the high-colored soak-water of manure heaps, of straw-yard drains and other filthy slops, and consequently sicken and die by dozens.

We have a troop of adult breeding fowls loose in the farm-yard; they pick up a large part of their living there. But they do not thrive so well and keep so healthy as other troops of breeding stock which we have stationed at houses purposely erected in grass fields far from the homestead. For a very small sum you may erect a square board house, tarred outside, lime-washed inside, and covered with asphalted felt. Each of the four sides is in a separate piece, the roof (if of a gable form) in two pieces, all knocked together at the corners with staples and pins. So a house, say six feet or seven feet cubic, can be popped into a cart, and temporarily set up in a pasture, or on a stubble, or wherever there may be a good picking for the fowls. A couple of perches, a few nests, and a drinking-pan for the furniture, while the ground covered in by the house (for there is no wooden floor) is spread over with loose earth, ashes, and mortar. Such is the home for one cock and eight or ten hens and pullets during the breeding season, or the home of double this number of half-grown chickens. The house should be placed against a hedge, or in a corner where two hedges meet, so that a few poles or posts protect it against cattle.

There can be no good reason against grazing fowl as well as other "animals," and the farmer who tries it for the first time will be surprised at the amount of "grab" (literally, perhaps,) which the active scratchers and pickers will find in a grass field, in and under the droppings of sheep and cattle, among hedgeposts, upon ditch sides, and so on; only a small amount of grain being necessary twice a day. We wish that many farmers would take our advice—procure what hardy sort you most fancy, Cochins or Brahmas, that endure close quarters; game that are strong old English birds; Dorkings that like dry chalk and gravel countries; or, if you are in a low or wet neighborhood, on a tenacious soil, put a Cochins cock to Dorking females (no cross breeds allowed for parents, mind, but get good blood and pure breeds) and you will have hardihood in your chicks, as well as weight and quality in your couples for market.

The Apiary.

Farmers should be Bee-Keepers.

Mr. Jasper Hazen, of Albany, N. Y., an experienced Apiarian, gives the following hints on the value of bee-raising, and on managing them:

There are several reasons that present themselves to my mind, why the farmers should be the bee-keepers, and the profits from the flowers produced upon their farms be theirs, as well as the profits of fields of grain and grass. The fields are theirs and they are entitled to the products. The product of honey may be secured with much less expense and trouble in proportion to its value, than the other products of their fields. From 50 to 200 lbs. of honey may be secured annually, upon each hundred acre farm, on an average; worth from \$16 to \$60—and require but an outlay of \$10 for several years; (*i. e.*) the cost of one hive and swarm of bees.

I have a swarm placed in my hive in 1867, for which I paid \$5, from which I have taken in three years 580 lbs. of white clover honey in boxes, and in the seven seasons including its first year has averaged more than 100 lbs. This, an ordinary season, I have taken from it 140 lbs., by August 2nd—of course all white honey.

If we divide the cost of the hive and swarm (\$10) into 1000 parts it will bring the actual cost of the honey at one cent per pound. But this is my best hive, the only one from which I have taken 200 lbs. of honey in one season; my next best gave me 174 lbs. But it can hardly be expected that farmers with only one or two hives of bees will seek to become expert in the management of bees and handle movable comb frames, raise queens, &c., &c.; nor is it necessary. The hive is constructed with either movable frames or bars. I have used both. The best hive of which I here speak is made with bars and no trouble, but to put on the surplus boxes in their season and remove them when filled.

I have another hive from which I have this season taken 94 lbs. of surplus, all white clover honey; 234 lbs. from two colonies.

In many fields I have no doubt, they would have done better, and in some not as well.

This is an ordinary yield.

P. S. If we consider a few facts, the product of 200 lbs., surplus by a non-swarmers need not surprise us.

1. No surplus honey is stored by the swarmer, as a general rule, while the bees are making preparation for swarming. They cluster outside of the hive in idleness.

2. If a second swarm issues, eight or ten days more are lost.

3. Sometimes third and even fourth swarms issue.

4. All this time is improved by the whole working force of the whole colony in the non-swarmers. The old colony and all the new swarms are the product of the old queen, and all the brood in the first swarm. With such a force instead of working in three or more hives, all operating in one hive and its surplus boxes, with no loss of time in preparation for swarming, I think 200 lbs., and even more, may be secured in surplus.

THE AMERICAN FARMER.



THE FLOWER GARDEN.

Floriculture, &c.—January, 1874.

By W. D. BRACKENRIDGE, Florist and Nurseryman,
Govanstown, Baltimore county, Md.

The Green-House.

In the midst of winter, it is really delightful and truly refreshing, to step in from the biting frost and drifting snow, to a warm plant conservatory, well garnished with Camellias, Azaleas, Calla Lilies, Cinerarias, &c. It makes one feel summerish all over; and only the absence of old *Sol's* perpendicular rays, reminds us that winter reigns without, while within all is artificial; yet in this we feel the great utility of a conservatory, where we can have the products of summer, with other additions, all the year round. To give a fictitious view of a plant-house at this season of the year, is not our forte, or aim; we delight in something that pleases the eye or delights the olfactory organs: now what is prettier than a half-blown Rose or Camellia bud, or what is more fragrant than the Daphne odora, Olea fragrans, or some of the aromatic Orchids, or air plants, as they are sometimes called? And then, who does not love the scent of the Apple and Nutmeg Geraniums, as well as the sweet-scented Verbena, and no one who has his senses about him will turn up his nose at such universal pets as the double-flowered sweet-scented Violet, Clove Carnation or Wall Flower; any one of which is worthy of being cared for—yes, cared for, for some people have the idea that it is only necessary to place plants under glass, and then

they require little more looking after than does the hat hung on the rack, to remain untouched until it is wanted. Now we maintain that a cultivator of plants must be vigilant and intelligent, to see that soil, humidity, situation and temperature are adapted to the requirements of each individual under his charge.

Succulent and downy-leaved plants, as a general rule, love light and air; on the other hand, those with membranaceous or smooth broad foliage, are less susceptible of withstanding the full rays of the sun, unless the atmosphere is highly tempered with moisture.

The display of bloom at this season will consist principally of Camellias, Roses, Bouvardias, Laurestines, Calla Lilies, Daphne odora, Hyacinths, Stevias, Azaleas and Abutilons. The Azalea will stand forcing much better than the Camellia, which drops its buds before they expand, if removed to a high temperature.

Pot Verbenas from the cutting bed, and where room is scarce, three plants may be placed in a 3-inch pot, but one plant in the same sized pot is better. Cuttings of all sorts of plants, that have made roots, should be potted off before the roots become matted.

Now, and on through the month of February, is a favorable time to propagate Begonias, Geraniums, Roses, Eupatoriums and other soft-wooded plants, for bedding out or pot culture, and can be effected either by seeds or cuttings. To propagate Ericas, Epacris, Diosmas, Pimelias, Boronias and similar hard-wooded plants, short

cuttings should be chosen of half-ripened growths, inserting them in sand and peat, observing to drain the pots well, then place a bell glass over the cuttings; these should be examined frequently, so as to rid them of damp and decay.

Bring into light and heat, any succession Hyacinth and Tulip roots; and those done blooming may be removed from the flower stage, and placed where they can receive light to ripen the roots. Examine bulbs of Mexican Tiger Lily, Gladiolus, Tuberoses, Caladiums and Dahlias, in order to prevent their being spoiled by damp; Caladium roots require, when in a dormant state, to be kept in a warm, dry place.

Begonias are now very numerous in kinds, and many of them fine growers and free bloomers, being admirably adapted for window culture, particularly the kinds known as B. Sandersonii and Fuchsoides; when kept in a temperature of 55 to 60°, they will bloom all winter—in fact, when well grown, they will produce flowers all the year round. In the January No. of last year, we gave an account of how the various kinds were propagated; to this we would refer the inquiring reader. There is also another tribe of plants becoming very popular, and they would be more so, were not such high prices asked for them—we mean Orchids, or air plants, the cultivation of which is rather peculiar, and next month we will state what the peculiarities are. At present, we close by reminding our readers of the propriety of giving air freely, in mild weather, to both glass-houses and cold frames; and to use water rather sparingly at the root, as well as to see that all plants under their charge are kept free of decayed leaves and insects; the free use of water by the syringe, is the best cure for the red spider and thrip; the green fly is easily extirpated by fumigations of tobacco.

Tri-Colored Geraniums.

Editors American Farmer:

This beautiful class of plants does not receive the attention from the hands of our amateur and professional horticulturists that it deserves; certainly nothing is more gorgeous than a shelf of these beauties, with their colors blending into each other, forming a continual "Autumn Setting Sun" every hour in the day. I believe the only reason given why they are not raised is, "I can't" (at least if the truth was known that *would be it*.) While on a visit to Philadelphia, some years since, I had occasion to go through the green-houses of Mr. —, and, for the first time, I really saw the tri-colors in their glory. I could not resist asking him how they were grown, and from him I learned several points, which, with a few more, gained by observation, I give to the public, hoping it may be the means of advancing the love of the profession in this line. I would here say, that a great many of the "knowing" gardeners, those who had to pay to learn, do not always tell the *exact* truth about how to grow plants; it is very easy to put one off who don't know any better, by telling him something which sounds plausible, and then, if he does not succeed, by saying "you did not do it right," &c. In some cases, I agree with them. I can't see how it is to be expected of a man, who has spent a lifetime searching for the best ways and methods to grow certain plants, and, after having reached

the goal, to throw it open to the world for a mere thank you. But this is foreign to the culture of the plants under notice; to this end it is necessary: first, to have a good, warm hot-house; second, plenty of light; and lastly, a good thrifty plant to begin with. I have used several compositions of earth, but find the following the best: take of turfy loam, two parts, and well rotted; cow manure, one part; coarse sand, one part; mix all together, *by hand*; drain the parts with charcoal; use dry, rotten moss to cover over the drainage, if possible; plunge the pots in a bed of tan or leaves, (any place will do, where there is a good bottom heat;) keep the bed damp, water the plants sparingly, *and never allow a drop of water to touch the foliage*. This last is the great secret, known only to a few. The following six varieties will give you all the different shades you will want, if properly grown:

1. Sophia Dunaresque—Broad golden margin, dark crimson zone, strong grower.
2. Lady Callum—Broad rich leaf, dark zone, margined with scarlet and gold.
3. Louisa Smith—Green foliage, margined with gold and red, dark zone.
4. Mrs. Pollock—Fine, large, green leaf, overlaid by a beautiful bronze and red zone, edged with red, margin golden yellow, (fine.)
5. Sunset—Golden margin, broad dark zone, shaded with scarlet.
6. Italia Unita—Leaves margined with white, bright carmine zone.

In conclusion, I would say that it is impossible to grow these pets of mine south of New York, in the summer, owing to the dry parching heat.

A YOUNG UN

FLORAL DECORATIONS FOR PUBLIC DINNER TABLES.—The *London* (Eng.) *Garden* says at a recent dinner at the Inns of Court Hotel, more than the beauty of a dozen flower gardens was tastefully arranged in the great hall of the hotel. Thousands of flowers and plants were employed, and these all in the freshest health, and the charm of the whole was in the tasteful, artistic arrangement. No stiff, poor, flat or round-headed compositions, but free and graceful as nature itself. Dishes were filled in pairs to match with white, pink and scarlet; the upper part of the dish was scarlet Geranium with crowning masses of Geranium Christine (pink) resting on Lycopodium Denticulatum. The lower part or base of each stand, had its bed of Lycopodium, with here and there magnificent blooms of Marechal Neil and other grand roses, interspersed with Lilies of the Valley. The decorator who supplies these flowers pays upwards of \$2,000 annually for cut blooms of these varieties of Geraniums, and \$3,500 a year for Lycopodium Denticulatum.

SULPHUR FOR FRUIT.—A very intelligent fruit-grower lately told us, that reflecting that grapes always seemed to flourish on soils of volcanic origin, he assumed it was attributable to the sulphur present, and determined to try that substance as a fertilizer for them, which he did with very satisfactory results. Encouraged by this, he made a mixture of lime, salt and sulphur, and applied it to his peach trees with a surprisingly good effect.

The American Farmer.

PUBLISHED ON THE FIRST OF EVERY MONTH

By SAM'L SANDS & SON,

9 North street, near Baltimore street, Baltimore, Md.
(sign of the Golden Plow.)

SAM'L SANDS, } Editors and Proprietors.
WM. B. SANDS, }

SUBSCRIPTION, \$1.50 a year, in advance. To Clubs of five or more, \$1.00 each. For \$10, eleven copies will be sent.

ADVERTISING RATES.

	1 Mo.	3 Mo.	6 Mo.	1 Year.
One Square, 10 lines.....	\$ 1.50	\$ 4.00	\$ 7.00	\$ 12.00
Quarter Page.....	6.00	15.00	22.50	35.00
Half Page.....	12.00	25.00	40.00	70.00
One Page.....	20.00	45.00	75.00	120.00

Cover Pages subject to special contract.
Transient Advertisements payable in advance—all others quarterly.
Advertisements should reach us by the 20th of the month, to secure insertion in the succeeding issue.

JANUARY 1, 1874.

Our New Volume.

Our readers cannot fail to notice the change in the appearance of our journal. The object we had in view in joining to our older title that of the *Rural Register* having been accomplished, the latter is allowed to drop,—the simple form being more convenient. Besides our title page, the whole suit of type from which the paper is printed is entirely new, and its clearness and beauty will commend it to all eyes. There is also an enlargement in the size of our pages, which will be found to be wider and longer than formerly, so that a considerable gain is secured of reading matter in each issue. The *Farmer* is now printed at the office of the *Baltimore Price-Current*, No. 5 S. Calvert street, and its general arrangement and execution reflect great credit, as we think, upon the taste and skill of Mr. Jonathan W. Scott, the manager.

☞ We have largely increased the edition of the *Farmer* for this volume beyond that of the last; but as the indications are for very heavy additions to our subscription list, we would advise those who may intend subscribing, and wish to have the volume complete, not to delay forwarding their subscriptions, as we may perchance run short of the earlier numbers, as we did last year,—and we do not stereotype our pages. A word to the wise is sufficient.

Clubs.—Will our friends oblige us by renewing their clubs as promptly as possible? It may sometimes happen that the original get-together of the club will this year fail to get up the club. In all such cases, will some of the other members be good enough to attend to it? Old subscribers who fail to renew in clubs will, of course, be charged at the single subscription rate, \$1.50.

OUR CORRESPONDENTS.—We are especially grateful to our numerous contributors to the initial number of our new volume. Their combined favors have enabled us to present this month a feast of good things, which will be relished by our appreciative readers. The paper of Capt. McGinnis on lime deserves the careful reading of every farmer desirous of learning the most effective method of its application, as does also Gen. Goe's illustration of the profit in raising sheep.

We have made an arrangement to lay before our readers a monthly letter from France, on agricultural topics. This doubtless will always be found interesting, and oftentimes useful. Mr. Wenig, a subscriber to the *Farmer* in Prussia, promises to give us occasionally some account of farm operations as practiced in Germany.

Our Horticultural Department is full of sound doctrine from capable hands. Messrs. Emory, Kerr, Massey, Fitz and Wilkins are all prominent and successful in that line.

In the Ornamental Department, Mr. Brackenridge begins a new series of his admirable papers, which are read with great interest by all lovers of rural life.

☞ To these, and all our other contributors, we offer our thanks, hoping they and many others will continue to load our pages with the results of their experience and investigation.

CO-OPERATIVE DAIRYING.—We are glad to announce that we have been promised by Mr. O. S. Bliss, secretary of the Vermont Dairyman's Association, who is a high authority on this subject, a series of papers to run through several numbers of the *Farmer*, on this very important branch of farming—one in which we take a great deal of interest, and which is exciting much attention in quarters where the system is now unknown. His first communication appears elsewhere in this issue.

☞ Read the advertisement of the Taylor Manufacturing Co. of Westminster, Md., who offer a variety of very useful engines and machinery.

Farmers' and Planters' Agency.

We call attention to our advertisement offering to attend to the purchase and shipment of all kinds of *Farm Supplies*, such as fertilizers, implements and machinery, improved live stock, seeds, &c. Having a large experience in this business, we believe we can effectively serve those who entrust us with their orders. In most cases we make no charge to the purchaser for our services, a commission being generally allowed us by the sellers.

We have not heretofore received consignments to sell for our friends, but we have arrangements by which persons wishing to make purchases through us can send us cotton, or other produce, to be sold for their account, and for which we will be responsible. This will be a convenience perhaps to some of our customers who have no factors in this city, as was illustrated in the case of a gentleman in South Carolina, who, purchasing some imported cattle through us, sent cotton to pay for them, remarking (it was in the midst of the panic) that, not knowing what banks to trust, he sent his own produce direct to us—with a result, we may add, entirely satisfactory to him.

CALIFORNIA PRODUCTS.—Mr. E. Stabler, Jr., recently called in at our office to show us a monster California pear, which had been sent to him from the Golden State. It was the Winter Bartlett variety, measured seventeen inches in circumference, six in height, and weighed thirty-four ounces. Some California acorns which he gave us were nearly two inches long.

DAIRYMEN'S MEETINGS.—The American Dairymen's Association holds its annual convention on the 13th, 14th and 15th inst., at Utica, N. Y. The Vermont Association meets at Essex Station on the 23d, 23d and 24th. The sessions of both bodies will doubtless be very interesting, as the most experienced dairymen will be in attendance and give their experience.

☞ We have a communication, signed "Gunpowder," asking the attention of the Gunpowder Farmers' Club to the subject of associated dairies, and suggesting that the effort be made to induce the enterprising owner of "Glencoe" to establish a cheese factory on his place—the business of sending milk and cream to the city being, the writer says, overdone.

☞ Messrs. R. W. L. Rasin & Co., an old established fertilizer house here, offer in this month's *Farmer* their soluble sea island guano, of which a very favorable report is made by Prof. Wilson.

MR. BRACKENRIDGE'S CATALOGUE FOR 1874.

We have at our office a number of the new catalogues of the "Rosebank Nurseries," which we shall be glad to hand to persons desiring them. Our friend Brackenridge is so modest that he does not talk much about his establishment, nor of the varieties and attractions it contains; but those who are acquainted with the facts know his assortment is unusually complete, especially in the ornamental deciduous and evergreen trees and shrubs. Of the latter class his collection is particularly noticeable, as his display last year at the State Fair would indicate. Mr. B.'s experience is large and varied, so that he is well qualified to advise those desiring stock for special purposes.

CHEERING OUTLOOK.—The reduction of imports for eleven months, to December 1st, into the port of New York, compared with the same period in 1872, amounted to \$40,000,000;—the increase of exports for the same time, exclusive of specie, was \$60,000,000; which shows a balance of merchandise trade in our favor at that one port alone of \$100,000,000.

☞ Mr. Joshua Horner, Jr., presents to the notice of cotton planters his phosphate and bone of various kinds, with a guarantee worthy of notice.

☞ The advertisement of the Jack, Alvarado, is deserving of attention from any one needing such an animal, as his owner, it will be seen, proposes to sell him very cheap.

Profit from One Hen—A Suggestion.

An old subscriber to the *American Farmer*, in Caldwell county, N. C., in renewing for 1874 and sending a club of new names, says:

"My wife had a blue hen the past season that laid thirty-two eggs, and raised besides eight turkeys and twenty-five chickens. They were all sold in our little market, as follows:

32 eggs, at 20 cents a dozen.....	52
8 turkeys, at \$1.50 a pair.....	\$7 20
26 chickens, at 18 cents a piece.....	4 50
	—\$12 22

Who can beat that?

M. D. S.,

That is a pretty good return from one hen! It gives us, too, a little text on which to hang a suggestion. It is that if those farmers who think the times are too hard to take a paper will take one hen and properly care for her, she will easily net them enough to pay for their county paper, their religious paper, and the *American Farmer*, and that they cannot afford to do without either one of the three.

Farmers' Meetings, &c.

Maryland State Agricultural Association.

At a meeting on the 17th ult., a report was received from the committee appointed to devise means to increase the usefulness of the Society. The following resolutions were presented and adopted:

Resolved, That it is expected and necessary, for the full development, benefit, growth, and usefulness of the Association, that the publication of essays, transactions and proceedings upon agricultural subjects, the institution of experiments, the establishment of libraries, the collection and preservation of models and specimens, the providing of convenient rooms and places of resort for persons in pursuit of agricultural information, and the general promotion of the interest of agriculture and the arts and sciences connected therewith, be no longer neglected or postponed, and that immediate steps be taken for the furtherance of the same.

Resolved, That a committee, consisting of Messrs. A. Bowie Davis, J. H. Rieman and Wm. S. G. Baker, be appointed, with full power and authority to obtain suitable rooms, and to furnish the same for the use of the Association; that monthly meetings be regularly held in said rooms for the reception of essays, discussions upon agricultural subjects, and reports upon the condition, prospects and advantages of the different counties of the State, and that farmers from this State and other States, and strangers visiting the city, be cordially invited to attend said meetings and participate in the same,—the object being to unite the agricultural interests in closer bonds of fellowship and union, and to receive and impart information of common interest.

Resolved, That this Association solicits the sympathy and co-operation of all other callings, trades, and professions, as all must see and feel how dependent we all are upon the productions of the soil, and the success and prosperity of the husbandman.

General Brown tendered his resignation, which was accepted with regret, the meeting tendering the thanks of the Association to Gen. Brown for his untiring efforts in its behalf.

The Hon. A. Bowie Davis, of Montgomery county, was unanimously elected President, and Gen. Brown to the Executive Committee, vice Mr. Davis.

This is a step in the right direction, and it is to be hoped that the efforts about to be made will place the association upon a basis which shall command the confidence of the farmers of the State. What is wanted is working and intelligent men, with broad views, divested of all bias which would cause any obstruction in cementing a thorough co-operation in a work so necessary not only to the best interests of our State, but to the salvation of the society. No man in the State has more the confidence of its farmers than the gentleman who is placed at the head of the association for the coming year. He is possessed of every social virtue and a zealous desire to pro-

mote the agricultural cause, in which he is so deeply interested. We sincerely hope that the good judgment which the new president is known to possess, will enable him to carry out the plans presented, and thereby confer lasting honor on his name, and we cordially tender him our aid, in any direction it can be given, in carrying through the good work he has undertaken.

HORTICULTURAL SOCIETY.—We some time since recommended to our amateurs and professional horticulturists, the establishment of a horticultural society, for seasonable exhibitions of fine flowers, fruits, &c. We are requested by some of the best-known horticulturists of our vicinity to announce, that an attempt will shortly be made to resuscitate the old society, or organize a new one. We wish it every success, and will be on hand to give it all the aid and comfort in our power, through the medium of the *Farmer*.

Baltimore Co. Agricultural Clubs.

The *Gunpowder Club* held its last monthly meeting at the residence of Samuel M. Price. Nelson R. Miles was appointed foreman for the day, and Thos. Gorsuch, the secretary, read the proceedings of the last two meetings.

As is usual, the members were invited to visit the out-buildings and surroundings of the farm of the host, all of which, as we have personally found on former occasions, bespoke the master hand of Mr. Price, who was a competitor for the premium of the club for the best acre of corn, and though he did not succeed in carrying off the prize, he secured the very large yield of 23 barrels to the acre. The pressure upon our pages this month prevents our giving as full details of the examination of the farm as we could desire, an account of which we find in the county paper, the *Union*. (We were reluctantly compelled to forego the pleasure of a personal attendance, as is our usual wont, upon this club's meeting.) The question for discussion at this session was, "What is the best manner of raising and fattening, and curing pork?" and after a free interchange of views, it seemed to be the sentiment of the majority that "the hog was unprofitable for our farming." The next meeting of the club will be held at the house of Mr. Israel M. Price, and the subject for consideration will be, "With our near approach to a good and growing market, what is our best system of farming to pursue?" During the evening the usual accompaniment of the meetings, in the shape of an excellent table for the gratification of the inner man, was furnished by the good hostess, and we know, from former observation on similar occasions, that ample justice was done to it by her guests.

The *Farmers' Union* also held a meeting on the 6th Dec., at Cockeysville Hall, according to appointment—Samuel M. Rankin, President, in the chair, and Thos. Gorsuch, Secretary. The meeting acted on several matters, which, though of a

local character, were of much interest to the people of the county—prominent among these was the disposition of the fund arising from the sale of the old almshouse property near the city. This subject had been discussed by the district clubs of the county, and referred to the Union Club for its action. Mr. Rankin, the President, was the chairman of a committee to examine the question, and calling Mr. John D. Matthews, First Vice-President, to the chair, made a report, in which it was stated that the whole fund for the sale of the property was \$360,082.62, and after paying out of this certain claims upon it, and outstanding obligations still due, there will be left \$300,000 to the tax-payers of the county. The suggestion had been made to invest it in Government bonds, and the interest to be added annually to the tax levy, but the committee recommend the appropriation of the amount to payment of county obligations, thus releasing the tax-payers from taxes for two or three years. The report was accepted and adopted by the meeting, and a petition to the legislature was prepared for authority to enable the county authorities to carry out the plan recommended.

The following committees were appointed to report at next meeting: On arbitration, George Jessop, Evans Davis, N. T. Hutchins, Thos. C. Bosley, James Atlee; on railroad discrimination, John Crouthers, Jr., John Mason, B. McC. Hardesty; on dog laws, Thos. C. Bosley, Samuel M. Price, D. M. Matthews; on cheese and dairy farming, A. J. Gent, Edward Scott, Charles T. Halle; on an improved road system, William Webster, Wm. Harrison, George Merryman.

Resolutions by Dr. Joseph Merryman were adopted for a committee of thirteen to prepare a memorial to the legislature praying for new legislation for the protection of sheep husbandry, regulation of vagrant cattle, and an improved road system in Baltimore county.

Mr. Atlee called attention to the fact that the State-Agricultural Fair had run into the ground, with very little prospect of sprouting again, unless the farmers of the different counties took more interest in it. Mr. Rankin suggested a conference with farmers of other counties. Mr. Scott proposed that a committee of five be appointed to do this, and his motion being carried, the committee was appointed, and consists of Messrs. Jas. Atlee, Edwin Scott, A. J. Gent, Sturgis Davis and Dickinson Gorsuch.

Dr. Merryman, from the committee appointed to prepare a plan for a corporation for the purchase of supplies, made a report, which, after some discussion, was referred back to the committee.

Farmers' Council of Va. and N. C.

The annual session of this body was held at Petersburg, Va., on the 25th, 26th and 27th of Nov., and the attendance was large and eminently respectable in character.

The President, Major R. V. Gaines, of Charlotte, Va., made an address congratulating the council on the character of its membership and organization. Alluding to the granges, he said there should be no conflict or jealousy concerning them, as the common object in view was the education and enlightenment of the agricultural pop-

ulation, and that to this we must look for the final prosperity of the farmers' interests of the country. He remarked that the council was a State organization, commending its aims to intelligent citizens; that farmers need co-operation for their own protection, and this was the fundamental object of their association.

Officers for the ensuing year were elected, the President being Edward L. Drumgoole, of Brunswick, with several vice-presidents from Virginia and North Carolina, and an executive committee of five members.

A number of reports from committees were received, including a very able one by Major Ragland, of Halifax, on tobacco, the main portion of which we give elsewhere in this issue. Discussions followed on a variety of subjects, including immigration, farm labor, the finances and the monetary system, needful legislation, &c., in the course of one of which Gen. W. H. F. Lee said that the farmers of the State were bankrupt after the war, but that by hard labor they had now placed themselves on a solid basis.

Several interesting papers on agricultural and horticultural subjects were read, and resolutions were adopted recommending the farmers of Virginia and North Carolina to form, for mutual advantage and protection, township and county societies subordinate to the council; for the appointment of a committee to establish factories, to be owned and controlled by farmers, for the manufacture of fertilizers; and others, looking to action on the subject of immigration, &c. The council then adjourned, to meet again at Petersburg, November 26, 1874.

Our report is necessarily brief and imperfect, but we learn that the proceedings were very interesting, harmonious and enthusiastic.

BEE CONVENTION.—The North American Bee Keepers' Convention met at Louisville, Ky., Dec. 4th, as announced. The only business which appears to have been transacted was the election of officers for the ensuing year, the appointment of representatives to the Centennial Exhibition in 1876, and the reading of a paper by D. S. Aders, on the wings of bees, in which he advanced the theory that the sense of smell, breathing and hearing of bees is lodged, in the wings. The next meeting will be held at Pittsburg, Pa., on the second Wednesday of Nov., 1874.

LAWNS.—This is how F. R. Elliott, in *Gardener's Monthly*, recommends they be made: A good, deep soil, thoroughly trenched sixteen inches deep, raked down, with every stone removed, and seeded per acre with five bushels of what is generally termed lawn-grass seed. The mixture I would make should be *twenty-eight* pounds of clean Kentucky blue grass, *the same* of red top, *twelve* of white clover and *ten* of creeping bent grass to the acre. In sowing this seed, do it three several times, *i. e.*, divide it into three parcels; sow first, east and west, then rake the ground lightly; then sow north and south, rake again lightly, not over half an inch deep, with a light steel rake; then sow again the last third of the seed east and west, and roll it—rake no more, but roll it, first east and west, then north and south, and then again east and west.

The Family Circle.

KIND THOUGHTS.

Let us cherish a memory for pleasant things,
And let all the others go.
It is never by giving "tit for tat"
That we touch the heart of a foe;
It is not by dwelling on fancied wrongs
That we feel their sting grow less;
And malice once entering the heart is sure
To crush out all tenderness.

Forgive, forget, though the wrong be great,
And your heart be stricken sore;
For thinking of trouble makes it worse,
And its pain is all the more.
Do kindly things to your neighbors, e'en
Though they do not so to you;
Though they be wrong, unjust, unkind,
Keep your own heart ever true.

The heart is a garden, our thoughts the flowers
That spring into fruitful life;
Have care that in sowing there fall no seed
From the weed of cruel strife.
Oh! loving words are not hard to say,
If the heart be loving too;
And the kinder the thoughts you give to others,
The kinder the thoughts of you. —*Hope Arbor.*

GOOD LIFE, LONG LIFE.

He liveth long who liveth well;
All else is life but flung away;
He liveth longest who can tell
Of true things truly done each day.

Then fill each hour with what will last,
Buy up the moments as they go;
The life above, when this is past,
Is the ripe fruit of life below.

Sow love and taste its fruitage pure;
Sow peace and reap its harvest bright;
Sow sunbeams on the rock and moor,
And find a harvest-home of light.

Old Age.

It is a prevalent error of the young to look upon old age as one of the unavoidable evils besetting our pathway in life, which we must always dread for ourselves and can only compassionate in others. But whoever thus questions the Providence of God by presumptuously declaring a part of the existence He has bestowed in His wisdom, a misfortune, must be blind to the benevolent designs so plainly written on the nature of man. The great law inscribed there is forgiveness. We were placed here on earth under the probationary form of moral government that we might our lives long grow in capacity for truth and virtue, that each day might bring us nearer the great type of perfection manifested once in humanity as a model for man.

When heaven itself is the goal for which we are striving, how dare we shorten the time allotted to us for perfection, and sacrifice the inestimable treasures future years perchance may have in store for us?

This work of preparation is not appropriated to youth or middle-age, but to a life time. We cannot cultivate so successfully with the impetuous ardor of youth or the unbending will of manhood, those christian graces for which the contemplative mood of old age, when the sublimer faculties of the soul holds sway, seems perfectly fitted.

Not only should the young regard old age "honorable," as Solomon declared it; not only

should the ready hand or eye lend themselves willing servants to the tottering step or failing sight of the aged man; but they should also ever turn a reverent ear to his counsels. Experience has given him wisdom, and with his age-dimmed eyes, he can read more clearly than we, the book of life,—for to him its pages will be lighted with bright rays gathered from the past.

It is true that a disregard of physical laws may bring an old age of suffering, or a neglected intellect be wasted into worse than childish imbecility. The man in his gray hairs may live only to mourn over the errors of his youth; or, most terrible of all, may "have grown old in sin and hardened in his crimes." Then indeed we may say it would have been better if he had died in his youth, or better still if he had never lived. A merciful God can never have designed such an old age for his creatures.

Let us turn from this sad picture to the last years of one who all his life obeyed nature's sovereign laws, whom temperance has preserved from disease, whose intellectual and moral powers have been expanded and ennobled by every day of a long life. To him the crown of gray hairs is a crown of glory. A life like this grows only more beautiful as it approaches heaven. The soul, as it nears its release, gleams through the wasted form with a radiance so divine, we almost believe the angel tenement that is soon to enclose it is already blending with its clay, and shadowing forth the future glory.

Can we point the young to any goal of a merely selfish ambition, to any crown of worldly fame, so worthy of their noblest efforts, as an old age like this—crowned with the honors of a well-spent life. Can we point the middle-aged man, at the busy noon of life,—when the cares of the ever-urging present will scarce afford him time for either mercy or hope,—to any peace so serene as the rest and peace of old age.—*Selected.*

PLAIN TALK TO GIRLS.—Your every day toilet is a part of your character. A girl who looks like a "fury" or a sloven in the morning is not to be trusted, however finely she may look in the evening. No matter how humble your room may be, there are eight things it should contain, viz: a mirror, washstand, soap, towel, comb, hair, nail and tooth-brushes. Those are just as essential as your breakfast, before which you should make good and free use of them. Parents who fail to provide their children with such appliances, not only make a great mistake, but commit a sin of omission. Look tidy in the morning, and after the dinner work is over, improve your toilet.

Make it a rule of your daily life to "dress up" for the afternoon. Your dress may, or need not be, anything better than calico; but with a ribbon, or some bit of ornament, you have an air of self-respect and satisfaction, that invariably comes with being well dressed.

A girl with fine sensibilities cannot help feeling embarrassed and awkward in a ragged, dirty dress, with her hair unkempt, if a stranger or neighbor comes in. Moreover, your self-respect should demand the decent appareling of your body. You should make it a point to look as well as you can, even if you know nobody will see you but yourself.—*Household.*

MAN AND WIFE.—Thomas Jefferson wrote the following excellent advice. There is much human nature and good sense in it:

"Harmony in the married state is the very first thing to be aimed at. Nothing can preserve affection uninterrupted but a firm resolution never to differ in will, and a determination in each to consider the love of the other of more value than any object whatever on which a wish has been fixed. How light, in fact, is the sacrifice of any other wish when weighed against the affection of one with whom we are to pass our whole life! And though opposition in a single instance will hardly produce of itself alienation, yet every one has their pouch into which all these little oppositions are put; while that is filling, the alienation is insensibly going on, and when filled it is complete. It would puzzle either to say why, because no one difference of opinion has been marked enough to produce a serious effect by itself, but he finds his affection wearied out by a constant stream of little checks and obstacles. Other sources of discontent, very common indeed, are the little cross purposes of husband and wife in common conversation, a disposition in either to criticise and question whatever the other says, a desire always to demonstrate and make him feel himself in the wrong, especially in company. Much better, therefore, if our companion views a thing in a light different from what we do, to leave him in quiet possession of his views. What is the use of rectifying him if the thing be unimportant; let it pass for the present, and wait a softer moment and more conciliatory occasion of reviving the subject together. It is wonderful how many persons are rendered unhappy by inattention to these little rules of prudence."

ABOUT BEDS.—"Considering that about a third of our lives is passed in beds, they deserve much more attention than they get. France has long been in advance of the rest of the civilized world in this, having really paid as careful attention to excellence in this respect as to that of cookery. The grand secret of the superiority of French bedding is to be found not merely in the existence of good springs and well-filled mattresses, but in the fact that these mattresses are pulled and re-made annually. This is the reason why beds in other countries are generally such a mockery of the French beds, which they are intended to imitate. French houses usually have a courtyard behind, in which carpets are beaten, and various other domestic business is transacted, and here, in fine weather, may be seen the practice of mattress-stuffing. An old mattress, on which heavy bodies have lain for a series of years, becomes, no matter how well filled with horse hair, nearly as springy as street-car cushions. If you want a comfortable bed, here is the unfailling recipe: Firstly, very good springs; secondly, a thick hair mattress over them; thirdly, a thick wool mattress over that. Both mattresses should be re-made every two years." Who loves not the comfort and ease from a good bed? Why not have less show out of doors and more comfort? Some people have all their pleasure in dress, show, glitter, pinchback. Shoddyism!

☞ Say little, think much, do more.

DOMESTIC RECIPES.

(FROM A HOUSEKEEPER'S NOTE BOOK.)

BLACK CAKE.—One pound each of flour, sugar and butter; ten eggs, three pounds currants, two pounds raisins, one tablespoon each of ginger, cloves, mace and nutmeg, one pound of citron, one of blanched almonds, a glass of brandy and one of wine. This quantity requires four hours to bake.

COCOANUT CAKE.—One cup of butter, two cups of sugar, four eggs, one teaspoonful of soda, dissolved in a cup of milk, two teaspoonfuls of cream of tartar, one grated cocoanut, which should be mixed with flour. Beat the whites of the eggs to a froth. Add flour enough to make it about as stiff as pound cake.

SAUSAGE MEAT.—To ten and a half pounds of sausage meat put six tablespoonfuls of sage, five tablespoonfuls of salt and three of pepper. You may also add four tablespoonfuls of sweet marjoram and two of thyme.

RICE CAKES.—Boil half a pound of rice dry; when nearly cold sift into it about one quart of flour, and add a full tablespoonful of shortening. Then stir in one quart of milk; beat up five eggs light, and stir in the batter. Add a little salt and a small cup of yeast.

BEEF PATTIES.—Chop fine rare roast beef, season with pepper, salt, and a little onion. Make a plain paste, cut into shape like an apple puff, fill with the mince and bake quickly.

POTATO SOUP.—Take large mealy potatoes, peel and cut in small slices, with an onion; boil in three pints of water till tender, and pulp through a colander. Add a small piece of butter, a little cayenne pepper and salt, and just before the soup is served two spoonfuls of cream. Do not let it boil after the cream is added.

FLOUR PUDDING.—Take five eggs, one quart of milk, four tablespoons of flour, and stir well together. Bake in a quick oven and eat with cold sauce.

CREAM CAKE.—Take one pound of flour, one of sugar, half a pound of butter, half a pint of milk, four eggs, citron, raisins and spice to taste.

OYSTER FRITTERS.—Make a thin batter with eggs and milk. Drain the oysters, put them in this batter, and then fry them brown in lard.

CELERY SAUCE.—Boil celery and cut it up fine, add half a pint of cream, a piece of butter rolled in flour, and a very little water. Boil all up together.

CREAM PIE.—Boil one pint of milk, then beat together one egg, one cup of sugar, two tablespoons of flour, a little salt; add this mixture to the milk, and thicken over the fire. When cold flavor with lemon. Bake two crusts and put the cream between them, you will have a good pie.

HOW TO GET A HUSBAND.—Take of modesty a large portion, unite it with urbanity and good humor, to which add good sense, a plenty of love, which, with a virtuous heart and a pretty face, will surely succeed.

☞ Just as we were about closing our forms for the press, we received several communications for our pages, which are necessarily laid over. It is our intention hereafter to issue the *Farmer* a day or two later than has been our custom, but we hope our friends will forward their favors as early in the month as possible.

Hygiene.

Regular Eating.—Half of all ordinary diseases, says Dr. Hall in his *Journal of Health*, would be banished from civilized life, and dyspepsia become almost unknown, if everybody would eat but thrice a day at regular times, and not an atom between meals, the intervals being not less than five hours, that being the time required to digest a full meal and pass it out of the stomach.

If a person eats between meals, the process of digestion of the food already in the stomach is arrested, until the last which has been eaten is brought into the condition of the former meal; just as, if water is boiling and ice is put in, the whole ceases to boil until the ice has been melted and brought to the boiling point, and then the whole boils together.

But it is a law of nature that all food begins to decay, after exposure to heat and moisture for a certain time. If a meal is eaten, and in two hours another, the whole remains undigested for seven hours, before which time the rotting process commences, and the man has his stomach full of carrion—the very idea of which is horribly disgusting.

As, then, all the food in the stomach is in a state of fermentive decay, it becomes unfit for the purposes of nutrition and for making good pure blood. Small wonder is it that dyspeptics have such a variety of symptoms, and aches, and complaints in every part of the system, for there is not one drop of pure blood in the whole body; hence, the nerves, which feed on this impure and imperfect blood, are not properly nourished and, as a consequence, become diseased. They 'complain' they are hungry—and like a hungry man—are peevish, fretful, restless. We call it nervousness, and no one ever knew a dyspeptic who was not restless, fidgety, and essentially disagreeable, fitful, fretful and uncertain.

The stomach is made up of a number of muscles, all of which are brought into requisition in the process of digestion. But no muscle can work always. The busy heart is in a state of perfect repose for one-third of its time. The eye can work twice in a second, but this could not be continued five minutes. The hands and feet must have rest, and so with the muscles of the stomach; they only can rest when there is no work for them to do—no food in the stomach to digest. Even at five hours' interval, and eating thrice a day, they are kept constantly at work from breakfast until the last meal is disposed of, usually 10 o'clock at night. But multitudes eat heartily within an hour of bed time; thus while the other portions of the body are at rest, the stomach is kept laboring until about daylight, and made to begin again at breakfast time. No wonder is it that the stomach is worn out—has lost its power of action. Many girls become dyspeptic before they are out of their teens, in consequence of being about the house and nibbling at everything they lay their eyes on that is good to eat.

THE rule of dress should be—health and comfort first, ornament next.

USEFUL RECIPES.

ROT IN SHEEP.—Youatt says sheep beginning to be affected with rot should be sent to a salt marsh in preference to the best pasture on the farm. He then recommends bleeding, and a dose of two or three ounces of Epsom salts. To these means is to be added a change of diet—good hay and straw; then two or three grains of calomel, mixed with half the quantity of opium; and common salt should then be given, say two or three drachms, morning and night. When the inflammatory stage is passed, add stronger tonics to the salt, such as gentian and ginger roots, one or two drachms, each finely powdered, added to each dose. Keep the sheep on the best and driest pasture, with salt always in reach.

CUTS AND GALLS.—The best liniment for cuts, galls, spavin, poll evil, fistula, or any other of the external diseases that animals are liable to, is made by dissolving one ounce of pulverized corrosive sublimate and one ounce of gum camphor in one pint of spirits of turpentine, put in a strong bottle. Apply with a swab.

HORSES RUBBING THEIR TAILS.—To prevent horses from rubbing the hair off their mane and tail, take half a teacupful of sharp cider vinegar, pour on the spot where the rubbing is done, and card it while pouring on, and it will be found that this simple thing will stop rubbing down fences, or spoiling the looks of the tail in the stable.

CURE FOR GAPES.—A correspondent of the *Field* tells of a flock of eleven pure bred Creve-cœur chickens very bad with what is called "gapes," cured by a common halfpenny tallow candle melted and mixed into about a quart of oatmeal strabaut. The remedy was resorted to and the Creve-cœurs every one recovered and grew into finely developed chickens. He also tried this cure with invariable success on Brahmas, Dorkings, &c.

CURE FOR SWEENEY.—Take spirits of turpentine and saturate the skin freely with it, then lay a tolerably thick piece of cloth over the spot, and press hard with a heated smoothing-iron, sufficiently long to dry up moisture. I saw the above used, and although it was a severe case, it was cured in a remarkably short time.—*Cor. So. Cult.*

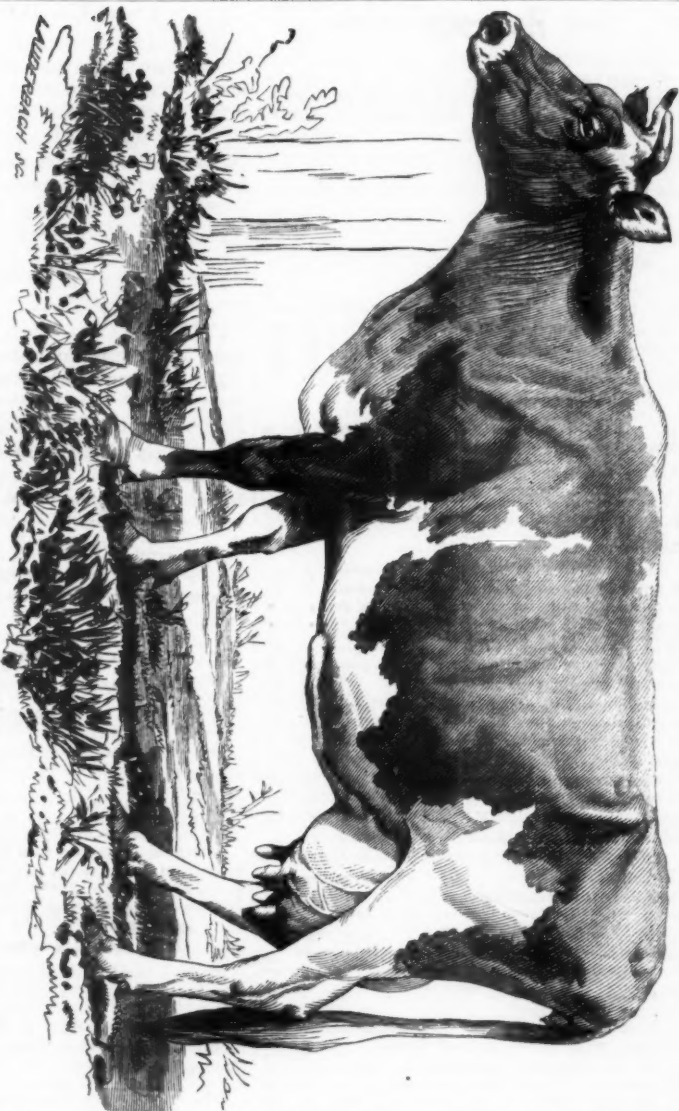
HOW TO USE PARIS GREEN.—D. C. Richmond, of Ohio, recommends the following way of applying this virulent bug-killer, avoiding the danger of the arsenic dust flying in the air and entering the breath. A hoghead of water with a faucet, is drawn on a wagon to the potato field, as a reservoir to draw from. Fill a pail with water and stir in a heaped tablespoon of pure Paris green, and more if impure. Dip in an old broom, and with it sprinkle the infested plants. Bright sunshine is the best time.—*Country Gentleman.*

THE USE OF SALT.—Horace Greeley said: "I estimate the value of salt at 25 cents per bushel on my place, which is some twenty miles from Long Island Sound and nearly twice as far from the broad ocean. That is to say: I consider ten bushes of salt per acre, applied to my fields one half in each of two successive years, about the best two dollars and a half worth of plant-food that money will buy me."

Duchess is a wedge-shaped cow, large-bodied for a Jersey, "smoke" color and white, with yellow skin and hoofs. Her udder has great capacity, is broad and deep, running well forward under the body. Her hair is described as being as soft and furry as a mole. She has made thirteen pounds of butter in a week; and recently three of her calves have been sold for \$1,400. Duchess may be considered one of the representative cows of her race in this country. It will be noticed she lacks the black points, some of which are given by Mr. Hazard as characteristics of the Jerseys, but which by some are regarded rather as fashionable than as essential marks.

IMPORTED JERSEY COW "DUCHESS."

Owred by C. L. SHAWLES, Philadelphia.



PENNSYLVANIA FRUIT-GROWERS' SOCIETY.—This association, which is a practical and working one, embracing in its membership many of the most prominent pomologists and horticulturists of the Middle States, will hold its Annual Meeting in Mechanicsburg, Cumberland Co., Pa., on the 21st inst. A large number of topics will be discussed in every branch coming within the scope of the society's aims, and the session will doubtless be a very interesting one. *The American Farmer* will, we expect, be represented as usual, that our readers may have the benefit of the proceedings.

VIRGINIA FRUITS IN ENGLAND.—*The London (England) Garden* says: Mr. Taylor, of Covent Garden Market, has just received from Mr. Leighton, of Norfolk, Virginia, some of the finest *Duchesses*. Owing to loose packing, most of them had got badly bruised, but such as were in perfection were quite equal, both as to size and flavor, to the same kind of pears imported from France. They weighed from sixteen to twenty-one ounces each, and measured fourteen and a half inches in circumference. A similar consignment has, we understand, been sent to the Queen. The flavor was very good.

LIST OF PREMIUMS

OFFERED FOR CLUBS OF SUBSCRIBERS TO

THE AMERICAN FARMER for 1874.

Subscriptions can be sent either at the regular rate of \$1.50 each, or at the club rate of \$1 each.

The table shows the number of names required at each rate to secure the articles offered.

ARTICLES.	Value of Premium.	No. Sub- scribers at	
	\$1.50	\$1.00	
No.			
1. A collection of Flower or Garden Seeds, or an assortment of Plants and Vines of same value.....	\$5 00	10	30
2. A \$10 collection of Seeds, or of Plants and Vines.....	10 00	30	40
3. A \$30 assortment of Seeds, or Plants and Trees, <i>your own selection</i> , from any of our advertisers.....	30 00	40	80
4. Howe Sewing Machine, with Cover and Attachments complete.....	70 00	80	175
5. Grover and Baker Sewing Machine, with Cover and Attachments complete.....	70 00	80	175
6. Bickford Knitting Machine.....	35 00	40	80
7. Silver-Plated Revolving Butter Cooler.....	10 00	30	40
8. Silver-Plated Breakfast Castor.....	8 00	15	30
9. Silver-Plated Ice Pitcher.....	15 00	30	60
10. Silver-Plated Cake Basket.....	12 00	25	50
11. Silver-Plated Fruit Dish.....	10 00	30	40
12. Set of Silver-Plated Teaspoons.....	6 00	12	25
13. Set of Silver-Plated Tablespoons.....	11 00	30	50
14. Set of Silver-Plated Table Forks.....	11 00	30	50
15. Silver-Plated Pie Knife.....	4 00	8	16
16. Child's Silver-Plated Cup.....	5 00	6	12
17. Solid Silver Fruit Knife.....	3 00	6	12
18. Silver-Plated Cream Ladle.....	1 50	4	8
19. Set of Dessert Knives, Ivory Handles.....	6 00	12	25
20. Superior quality Carving Knife, Fork and Steel.....	6 00	12	25
21. Gold Pen and Silver Case.....	3 00	6	12
22. American Gold Hunting-Case Watch.....	60 00	100	225
23. American Silver Hunt'-Case Watch.....	35 00	60	130
24. Webster's Unabridged Pictorial Dictionary.....	12 00	30	50
25. Webster's National Dictionary.....	5 00	10	25
26. Dexter Single-Barrel Breech Loader.....	22 50	40	75
27. Dexter Double-Barrel Breech Loader.....	50 00	75	100
28. Set of Light Buggy Harness.....	30 00	60	100
29. Gentleman's Fine Saddle.....	30 00	40	75
30. A pure breed Cotswold, Southdown or Shropshire down Ram.....	40 00	80	130
31. A thoroughbred Jersey, Ayrshire or Devon Bull Calf.....	75 00	150	300
32. A thoroughbred Shorthorn Bull Calf.....	100 00	150	250
33. A pair of pure bred Essex or Berkshire Pigs.....	50 00	60	100
34. A pair of pure Chester White Pigs.....	35 00	50	80
35. Fairbanks' Portable Platform Scales.....	23 00	40	70
36. Fairbanks' Union or Family Scales.....	14 00	25	50
37. Fairbanks' Counter Scales.....	10 00	30	40
38. Fairbanks' Trip Scales.....	5 50	10	30
39. Set Mathematical Drawing Instruments.....	4 00	8	16
40. One year's subscription to the American Farmer.....	1 50		10

Subscribers need not all be at one post-office, nor is it necessary for the names to be all sent at once.

Send the exact money with each list of names, and state in each letter that you are working for a premium.

This offer of premiums holds good till April 1st, 1874, but any premium will be sent upon demand, as soon as the proper number of names is received, with the money, to entitle the sender to the premium designated, but no name will count unless the money for it is paid by or before the date the premium is claimed. There is no competition. Every one gets what he has worked for, and may make his own selection.

Both old and new subscribers count in these lists.

Specimen numbers, blanks, posters, &c., furnished on application.

REMIT ALWAYS, when possible, by registered letter, post-office order, or draft.

We want agents everywhere to extend the circulation of *The American Farmer*. An examination of the above premium list will show it is extremely liberal in its terms, and that the articles offered will give a wide choice, and are as good as the money. We will, however, be willing to pay a *cash commission* to parties who have facilities for making up clubs, and should be glad to hear from such as would prefer to be compensated in that way for their time and trouble.

SPECIAL PREMIUMS.

The following are offered to the attention of canvassers:

GOLD PREMIUMS.

In addition to the above list of premiums, the Senior Editor of the American Farmer offers,

For the largest list of subscribers (not less than 100) from one person, **\$50 in Gold.**

For the second largest list of subscribers (not less than 100) from one person, **\$30 in Gold.**

For the third largest list of subscribers (not less than 75) from one person, **\$15 in Gold.**

For the fourth largest list of subscribers (not less than 50) from one person, **\$5 in Gold.**

LADY'S PREMIUM.

For the largest club forwarded to the American Farmer for 1874 by a lady, we will give a *first-class Family Sewing Machine*, with equipments complete, price \$70, which can be seen at our office.

TAKE NOTICE.—These special premiums are given in addition to such other premiums as the several persons winning them may be entitled to and choose from our regular list, but no *two special* premiums will be given to any one person. The terms upon which they are offered are the same. The special premiums will be awarded April 1st, 1874.

Address all letters plainly, to

SAML. SANDS & SON,
Publishers American Farmer,
9 North St., Baltimore, Md.

Received.

From the Secretary, *T. L. Harrison, Esq.*, we have the **TRANSACTIONS OF THE NEW YORK STATE AGRICULTURAL SOCIETY FOR 1871.**

O. S. Bliss, Esq., Secy. of the Vermont Dairy-men's Association, sends us a complete set of the published transactions of that body, comprising the reports for the four years of its existence, with the addresses, essays, discussions, &c.

From *Luther Tucker & Son*, publishers of the *Country Gentleman*, we have received a copy of the **ANNUAL REGISTER OF RURAL AFFAIRS FOR 1874**, edited by *J. J. Thomas*. Price 30 cents. This is a little volume full of facts and suggestions which make it valuable for every farmer and every country household.

Mr. James Vick, Rochester, N. Y., sends us his **FLORAL GUIDE FOR 1874**. This beautiful work is published quarterly at 25 cents a year. Besides his catalogue of seeds, bulbs, plants, &c., with the profuse illustrations, *Mr. Vick* gives a great amount of useful information on horticultural subjects which may be read with profit by every cultivator. The ladies will be especially pleased with the "Guide."

We have from *E. W. Burwell, Esq.*, Cor. Secy. and Treas., a **CATALOGUE OF THE LIBRARY OF THE MASSACHUSETTS HORTICULTURAL SOCIETY**, probably the most complete and valuable collection of its kind in this country.

CATALOGUE OF WAVERLY NURSERY, Oak Grove, Westmoreland Co., Va., *John Rust*, proprietor. A large assortment of fruit trees, grape vines, &c., is here offered at very moderate prices.

THE **SCIENTIFIC AMERICAN**, published by *Munn & Co.*, New York, is one of the journals needed by every one who aims to keep informed of the progress made in science and the improvements in the arts.

CROP REPORT FOR NOV.—After our Dec. No. was issued we received the *Agricultural Bureau Report for November*.

The *Tobacco* crop averages 6 per cent. in yield less than the preceding year, but above that of 1870. The returns give for West Virginia, 129; Kansas, 114; Arkansas, 108; Virginia, 102; Illinois, 101; New Hampshire, New York, Texas and Oregon, 100. The other States range between 70 in Pennsylvania, and 98 in South Carolina and Florida. In condition Connecticut reports an average of 133; Massachusetts, 120; New Hampshire, 118; Vermont, 110; Maryland, Louisiana and Oregon, 106; Kansas, 102; Virginia, Georgia and Alabama, 101. Other States range between 100 in Illinois and 91 in Missouri.

Potatoes average 15 per cent. less than last year; 1872, it was estimated at 113,516,000 bushels; 1873, a falling off of 17,000,000 bushels is indicated. *Sweet Potato* crop is a fair one, both in yield and quality. The falling off this year in the *Hay* crop is estimated at 500,000 tons.

The falling off of the *Corn* crop this year is now estimated as far greater than was before reported. The report states the crop of 1873 at 858,000,000 bushels, and the falling off, compared with that of 1872, as equal to 233,000,000 bushels! This is a tremendous difference, and if found to be correct, must have a great effect upon the price of

this cereal, a larger amount of which than usual will be required for home consumption, in order to supply the place of the wheat which will be sent abroad, where high prices for it and a ready and inviting market is insured.

The report says, under the head of "Foreign Demand for *Wheat*." In Great Britain many have supposed that Russia is the heaviest contributor to these supplies, but the official figures show, when subjected to analysis, that the United States furnishes the largest proportion, the total for fifteen years being 143,817,685 cwt., or 27 per cent. of all, while the proportion for Russia is 24 per cent., or 126,756,477 cwt. Germany, exclusive of the Duchies, up to 1869, contributes 17 per cent., or 93,437,841 cwt., and France 9 per cent., or 51,342,638 cwt. British America has sent 5 per cent. These prominent contributions, with fractions of percentage omitted, make 84 per cent., leaving but 16 to all other sources of supply.

GREEN-HOUSES IN THE COUNTRY.—While on a visit to Lutherville, (Md.) some few weeks since, I was struck with the great number of conservatories in so small a town; most every house had one attached to it, and what could help to beautify the dwelling-house more than a well-kept conservatory? To the sight-seer, the passer-by, or the weary-worn laborer, how charming is such a place, as he sees through the glass, the dazzling foliage of the *Coleus*, *Begonia*, *Maranta*, *Dracena*, *Achyranthus*, *Croton* and hundreds of other beautiful plants, decked as it were in "scarlet and fine linen!" Towering high above its fellow neighbors, the *Acacia* showers, as it were, its drops of gold; the *Strelitzia*, with its fan-flowers, as though it felt the warmth, and fain would do the best it could toward cooling itself; the *Epiphyllum truncatum*, contrary-wise, not having such lofty aspirations, contents itself in making a corner (in flowers) and pleading *none and then only* for a drop of cool water, is now returning the blessing with a grand array of crimson flowers, and fairly begs of you to relieve its overburdened extremities. Time and space will not permit me to speak of the *Tyde*, *Eniclonia*, *Gesneria*, *Griffinea*, *Hyacinth*, *Amaryllis*, nor the *Camellia*, *Daphne*, *Azalea*, and what not? A. B.

ROSES AND FUCHSIAS.—Roses for winter bloom should before Nov. have been started into growth, in a good soil, two parts loam, one of manure, one half part sand; occasionally water with liquid manure (after they are well established); give them plenty of light and fresh air, and sprinkle twice a week, to keep down red spider; and to kill green fly, use tobacco smoke. To have plants bloom, heat, moisture and fresh air are all that is needed. On fine days, give all the air possible—this is the most essential element in plant culture. Such cuttings of *Fuchsias* as are needed for early bloom, should now be put in clean sand, and as soon as rooted, put into 3-inch pots, and when the roots commence to run inside the pot, re-pot into five or six-inch pots; give them plenty of room to grow in, and you will have short, stubby plants; pinch back such as have a tendency to ramble; drain the pots with charcoal—try it, no matter if *new fogies* say it is of no use; break the coal into pieces about the size of small marbles—it is the life of all plants. A. B.

The Persimmon.—We have received from a Washington correspondent a very interesting communication about the persimmon, which was brought to the notice of our readers so prominently in our last. Our pages at present are so largely occupied by other more pressing matters, and particularly in the horticultural department, that we are compelled to omit the article until our next issue, when it will be published. We will, however, give the following portion of it, which may be made available at the present time, to those who have the fruit already on their farms:—

The persimmon is a fruit, which, when ripe, can be dried by spreading out on a board in the shade, and when dried put away for use, being careful not to let them get too close and mildew. It can also be dried and put away like raisins; in fact, some varieties dry themselves on the tree, when they can be put up in boxes, and kept an indefinite period. The pulp can be separated from the seeds, spread upon earthen dishes, and dried like peach leather. A syrup can be made from the fruit, equal in flavor to good molasses. The fruit is also used in making a very fine beer, superior to that called lager, and many other drinks sold under the name of beer. When distilled, it will also yield an enormous product of spirits. As the season is now at hand for manufacturing up this fruit, we will herewith furnish the original recipe for beer, as published in the first volume of the *American Farmer* for the year 1819, April 16th, page 22:—

"PERSIMMON BEER.—The following receipt for a very pleasant beverage, is published *verbatim*, as it was furnished us by a particular friend. Mr. Jefferson's receipt:—

Gather the persimmons perfectly ripe and free from any roughness, work them into large loaves, with bran enough to make them consistent, bake them so thoroughly that the cake may be brown and dry throughout, but not burnt; they are then fit for use; but if you keep them any time, it will be necessary to dry them frequently in an oven moderately warm. Of these loaves, broken into a coarse powder, take eight bushels, pour over them 40 gallons of cold water, and after two or three days, draw it off; boil it as other beer, hop it; this makes a very strong beer. By putting 30 gallons of water in the same powder, and letting it stand two or three days longer, you may have a very fine small beer."

PORK PACKING.—The reports from the West show that the hog product is greater this year than ever before, and will add many additional millions to our export trade, for there is a demand in Europe for all the meat as well as bread we can possibly send them this year, all of which may possibly make the balance of trade so great in our favor, as very largely to insure our ability to resume specie payments at an early day. 930,000 swine entered the city of Chicago, to 1st Dec., from the 1st of Sept. Chicago's herds of swine are recruited from nearly all the Western States, and the pork goes not only to all parts of the East, but to Mexico, South America and Europe.

STARVING PEARS TO MAKE THEM BEAR AND ESCAPE THE BLIGHT.—This is what Mr. Husman, the well known vineyardist and fruit grower of Missouri, has to say in the last agricultural report of that State on pear growing:

"I have been growing pears for twenty-five years. When I commenced I had pears on rich land, and cultivated them highly; they grew fast, and as soon as they commenced to bear commenced to blight. I looked into the matter carefully and thoroughly, and soon became convinced that in order to raise pears successfully, we must starve our trees; and the next pear orchard I planted and cultivated with this end in view, and I succeeded, and one of the regrets of my life is that I ever disposed of that orchard. It is a permanent income to the present owner. It consists of 900 trees, 300 dwarf and 600 standard for market, and some 150 specimen trees for experiment. My trees were selected and grown with low heads. In this way a standard will bear as early as a dwarf, especially on poor soil. Standard Bartlett's will bear the second year from planting, Beurre Bosc and Flemish Beauty the third, and nearly all the fourth year. Choose poor soil, plow deeply, get your trees with low heads, plant carefully, and give very little cultivation and no manure, and you need not apprehend much, if any, damage from blight."

The American Farmer.

A gentleman writing us from King George county, Va., says: "Nearly all our people are desirous of taking the *Farmer*, though money is very scarce in the northern neck of Virginia, I assure you."

In sending a club, some of whom do not take advantage of our reduced club rate, A. S., of Mecklenburg county, N. C., says: "I hope to be able to get you some more subscribers, and would beg to state I am not working for a premium. I like your publication very much, and would like to hear of its being in every farmer's house in this State."

An esteemed Anne Arundel county, Md., correspondent, whom we have missed from our pages for some months, writes: "As soon as I can write anything deserving a place in your pages, and satisfactory to myself, I will do so, for I do sincerely wish to see the *Old Pioneer* successful and profitable in every way. I find it difficult to realize that another year is drawing so rapidly to its close, and that you have finished another volume. The months fly so fast that the most busy workers must leave many labors undone—many promises unperformed. I know none who have kept pace with their duties and pledges more faithfully than yourselves; and I think your readers would testify with one voice to the zeal and ability you have displayed in the management of your journal. It is not your fault, certainly, that we are yet struggling in the depths."

A subscriber in Rockingham county, Va., says: "The farmers of my county complain much of hard times, but I will do all I can for the *Farmer* for '74. I think times will never get too hard for me to take the *American Farmer*."

Table of Contents.

The New Year.....	1
Southern Agriculture, by Mr. Langdon.....	2
Growing Large Crops of Cotton in Georgia.....	3
Culture of Tobacco, by Major Ragland.....	4
Agricultural Implement Trade of Baltimore, (Sinclair, Norris, Durborrow and Griffith, Baker & Bryan).....	5
Harford Co. (Md.) Agricultural Fair.....	6
Co-operative Dairying, by Mr. Bliss, No. 1.....	7
The Cow—Best Breeds—How to Choose—How to Keep Her in Profit.....	8
Work for the Month.....	10
Pears and Pear Culture, by R. S. Emory.....	11, 38
Variation in Ripening of Peaches, by J. W. Kerr.....	13
Notes on December No. American Farmer—by Wm. F. Massey.....	13
Adams' Early Corn.....	14
On the Application of Lime, by Capt. McGinnis.....	14
Merino Sheep in Maryland, by Gen. Goe.....	16
Farmers' Clubs and Farmers' Papers, by Mr. Glimmer.....	17
Peach Orchards—Potash Salts—by Col. Wilkins.....	18
Setting Out Peach Trees, by Mr. Fitz.....	18
Deep Planting Trees, by Peter.....	19
Agriculture in France—Farm Laborers—Co-operative Farming—The Milk Business—Sugar Beets—Fertilizers—Salt—The Phylloxera.....	19
Agriculture in Germany—Crops in Europe.....	21
Live Stock—Short-horn Association—Stabling Horses—How to Use a Ram—Cure for Kidney Worms in Hogs—Chester Pig—Sale of Devons—The \$40,000 Cow—Loss of Sheep by Dogs—Addition to Muirkirk Herd—American Herd-Book.....	23
The Vineyard—The Catawba—Profit in Fruit Growing The Vegetable Garden—Laying Out a Garden.....	24
Poultry Yard—Poultry as Farm Stock.....	25
Apiary—Farmers should be Bee-keepers.....	25
The Flower Garden (with cut)—The Green-house, by Mr. Brackenridge—Tri-colored Geraniums—Floral Decorations—Sulphur for Fruit, &c.....	37, 37
Editorial Notices—Our New Volume—Hint to New Subscribers—Clubs—Our Correspondents, &c.....	28
Farmers' and Planters' Agency—California Products—Dairymen's Meetings—Proposed Cheese Dairy—Notices of Advertisements—Mr. Brackinridge's Catalogues—Cheering Outlook—Profit from One Hen.....	29
Farmers' Meetings—Maryland State Agricultural Society—Horticultural Society—Baltimore County Clubs—Virginia and North Carolina Farmers' Council—Bee Convention—Lawns.....	31, 32
Family Circle—Poetry—Old Age—Plain Talk to Girls—And Other Items.....	32, 31
Domestic and Useful Recipes.....	33, 34
Hygiene—Regular Eating.....	34
Jersey Cow Duchess, (cut).....	35
Penna. Fruit Growers' Convention.....	35
Farmer Premiums for 1874.....	36
Books, &c., Received—Crop Report.....	37
Persimmon Beer—Pork Packing.....	38
Compliments to American Farmer.....	38

NEW ADVERTISEMENTS.

R. W. L. Rasin & Co.—Soluble Sea Island Guano.
 Taylor Manuf'g Co.—Agricultural Machinery.
 J. M. Thorburn & Co.—Trade Price List.
 Joshua Horner, Jr.—Superphosphate and Bone Dust.
 Wilson & Co.—Improved Plastic Roofing.
 R. J. Baker & Co.—Chemicals, Fertilizers, &c.
 J. I. H. Gregory.—Vegetable and Flower Seeds.
 J. M. Thorburn & Co.—Seeds.
 R. & W. H. Cathcart.—Averill Paint.
 John Saul.—Seeds, Plants and Trees.
 John M. Griffith.—Brahma Fowls.

Baltimore Markets, Dec. 26.

The quotations below are Wholesale Prices.

Breadstuffs.—**Flour**—Market steady, but not active. Howard St. Super, \$4.50@6; do. common to fair Extra, \$6.25@6.50; do. good to choice do., \$6.75@7; Ohio and Indiana Super, \$5.25@6; do. common to fair Extra, \$6.25@6.50; do. good to choice do., \$6.75@7; do. Family, \$7.25@8.75; City Mills Super, \$5.50@6; do. low to medium Extra, \$6.50@7.50; do. Rio brands do., \$8.25@8.50; City Fancy brands, \$10.75; Fine Flour, \$4.50@5; Rye Flour, \$4.75@5; Corn Meal, City Mills, \$3.75.
Wheat—Market dull and heavy. We quote choice white \$1.80; fair to prime do., \$1.70@1.80; choice amber, \$1.85@1.97; good to prime red, \$1.70@1.80; common to fair do., \$1.55@1.65; Western amber, \$1.65@1.70.
Corn—Receipts good. Southern active; Western quiet. We quote Southern white, 70@76 cts.; do. yellow, 72@77 cts.; Western mixed, 78 cts.

Rye—Sales at \$3@94 cts. Receipts small.
Oats—Firm. Southern good to choice, 50@55 cts.; mixed Western, 50@52 cts.; bright do., 53 cts.
Broom Corn—Dull, 5@6½ cts. for fair to choice.
Cotton—Market quiet. We quote prices: Middling upland, 15½ cts.; low middling, 14½ cts.; good ordinary, 14½ cts.; ordinary, 14½ cts.
Dairy Products—**Butter**—Md. and Pa. rolls, 25@30 cts.; Western rolls, 28@32 cts.; do. tubs, 28@35 cts.
Cheese—Western, 15 cts.; Eastern, 14 cts.
Hay and Straw—Western, \$20@24; Pennsylvania, \$22@25; Maryland, \$24@26 per ton. Rye Straw, \$17@19; Oat Straw, \$15@17 per ton.
Live Stock—**Beef Cattle**—Market dull, being holiday week. Prices maintained. Best on sale, 5½@6 cts.; generally rated first-class, 5@5½ cts.; medium quality, 4@5 cts.; ordinary thin steers, oxen and cows, 3@4 cts.
Hogs—Receipts large and market active. Corn-fed hogs, 7@7½ cts.; still-fed, 6¾@7 cts., net.
Sheep—Active. Supply not great. Fair to good sheep, 4½@5 cts.; good to extra, 5@6 cts., gross.
Butterfats—Muscovado, 22@24 cts.; Porto Rico, 25@45 cts.; New Orleans, 40@75 cts. per gallon. **Syrups**—Calvert, 55@60 cts.; Chesapeake, 38 cts.; Canton, 25@28 cts. in bbls. and hnds.
Milk Feed—City Mills Brownstuff, 18@19 cts. per bushel, \$19@20 per ton; do. Middlings, 22@25 cts. per bushel, \$18@19 per ton.
Plaster—\$1.75 per bbl. of 320 lbs.
Provisions—Bulk Shoulders, new, 6½ cts.; clear rib Sides, 7 cts.; Bacon Shoulders, 7½ cts.; clear rib Sides, 8½ cts.; Hams, 12@14 cts.; Mess Pork, \$15.50.
Lard—Western, 8½ cts.
Rice—Carolina, 8½ cts.; Ramoon, 7½ cts.
Salt—Fine, 2.25@2.45; ground alum, \$1.50@1.55 per sack; Turks Island, 36@40 cts. per bushel.
Tobacco—Market quiet. Transactions very few. We quote Maryland frosted, \$3@4; sound common, \$4@5; good common, \$5.25@6; middling, \$6.50@8; good to fine red, \$9@11. Virginia—common to good lugs, 6@7; common to medium lugs, \$8@10; fair to good lugs, \$10.50@11. Selections (shipping), \$11@13.
Wool—Receipts limited and market firm. Washed, 40@45 cts.; unwashed, free from burrs, 35@40 cts.; unwashed, burry, 15@20 cts.

SAUL'S NURSERIES,
PLANT AND SEED ESTABLISHMENT,
WASHINGTON, D. C.

Early Beatrice, Early Louise and Early Rivers, the earliest Peaches known, with all the standard varieties.
 Beurre d'Assumption, Souvenir d'Orleans and other new Pears, with a large stock of the leading kinds, standards and dwarfs.
 Apples, Plums, Apricots, Cherries, Grape Vines, &c.
 Small Fruits, Currants, Gooseberries, Blackberries, Raspberries, strawberries, &c.

PLANT DEPARTMENT.

An immense stock of new, rare and beautiful plants, a new Catalogue of which will be published in February, with a colored plate, mailed free to all my customers—to others, price 10 cents—a plain copy to all applicants free.

VEGETABLE SEEDS

Of the finest quality, fresh and pure, grown by myself or specially for me, or my importations.

FLOWER SEEDS.

Being extensively engaged in importing and growing new and rare plants, consequently my facilities for seed saving are unequalled. The following catalogues, with others, now ready. Mailed free:

No. 1.—A Descriptive Catalogue of Fruit Trees.
 No. 2.—A Catalogue of Garden, Agricultural and Flower Seeds.

No. 6.—A Catalogue of new, rare and beautiful Plants.

Jan-31 JOHN SAUL, Washington City, D. C.

BRAHMA CHICKENS.

For sale a few pairs or trios of DARK BRAHMA FOWLS and a few EXTRA COCKS; also, a few pairs or trios of LIGHT BRAHMA FOWLS and a few EXTRA COCKS, bred from choice fowls.

JOHN M. GRIFFITH,

41 and 43 N. Paca Street,

BALTIMORE.

EGGS from either of the above for sale. Jan-31

J. M. THORBURN & CO.

15 JOHN STREET, NEW YORK,

Will mail upon application their
NEW CATALOGUE OF VEGETABLE AND
jan-2t AGRICULTURAL SEEDS FOR 1874.

To the Seed Trade.

TRADE LIST, FOR DEALERS ONLY,
mailed to applicants.

jan-2t J. M. THORBURN & CO.,
15 John Street, New York.

GUANO. GUANO.

We have constantly on hand A No. 1 GUANAPE PERUVIAN GUANO, which we offer for sale in lots to suit purchasers, at Agents' Warehouse at Point or uptown.

Bone Dust and Bone Flour,

which, by analysis, is the best bone offered for sale in this market.

AA, A, B & C MEXICAN GUANO,

which we offer for sale at low prices.

Give us a call before purchasing.

ROBT TURNER & SON,

43 and 46 S. Frederick St.

FIELD SEED of best quality always on hand. feb-1y

PAINT! PAINT! PAINT!

THE

AVERILL CHEMICAL PAINT!

Which for DURABILITY, BEAUTY and ECONOMY, is unsurpassed by any other PAINT MANUFACTURED, and is already mixed for use, of all the different shades of color to suit the taste, and is equally good for wood, stone or iron, and will not crack nor chalk off by friction, and will preserve its color twice as long as the best Lead Paint. It is sold only by the gallon, and one gallon will cover twenty square yards of smooth surface two coats.

Send for Circulars and sample cards.

R. & W. H. CATHCART, Sole Agents,

jan-1y

113 Thames street, Baltimore.

STRATTON'S GENTS' FINE FURNISHING GOODS.

DRESS SHIRTS A SPECIALTY.

No. 161 WEST BALTIMORE STREET,

Four doors above the old stand and two doors below Noah Walker & Co.'s,

oct-1y

BALTIMORE, MD.

ORCHILLA GUANO, AA, A TRUE BIRD GUANO,

Rich in Phosphates and Alkaline Salts,

From Orchilla Island in the Carribbean Sea, belonging to Venezuela, Lat. 11° 50' N., Lon. 66° 14' W.

Packed in GOOD BAGS, 167 lbs. each, 12 to the Ton,
\$30 per Ton, Cash.

B. M. RHODES & CO., Agents for the Sale of Orchilla Guano,

Office, 82 SOUTH STREET, below Corn Exchange,

july-1y

BALTIMORE.

THE AMERICAN FARMER.

MR. JAMES J. H. GREGORY of Marblehead, Mass., aims to supply one great want, which many a good farmer, when too late, has felt to his keen sorrow: Garden Seed that know how to come up: and when the crop is gathered proves to be just the kind the label said they were. Mr. Gregory is one of the few seedsmen in the United States who grows a large portion of the seed he sells, and he gets out a live Catalogue, as would be expected of the original introducer of the Hubbard Squash. His advertisement will be found in this number. His Illustrated Catalogue will be sent *free* to all applicants.

Short-Horns FOR SALE.

Having largely increased my herd by recent purchases and importations, I am now prepared to fill orders for **SHORT-HORNS** of either sex. I am now using in my herd the "Bates" Bull "Sixth Earl of Oxford" 9984; the pure Booth Bull "Royal Briton" (27,351), the Booth Bull "Lord Abraham" 11,223; the Princess Bull Lord Mayor 6,969. This gives me a combination of the best **SHORT-HORN** blood in the world. I have Calves the get of Fourth Duke of Geneva 7,931; Plantagenet 8,795; Salamander 9,046, &c., &c., &c.

I also breed **BERKSHIRE PIGS**, and have some very superior young Pigs for sale. I can ship animals to any part of the country with ease, as my farm is on the Washington Branch of the Baltimore and Ohio Railroad, 15 miles from Washington and 25 miles from Baltimore, and all way trains stop directly at my place.

Royal Briton will serve a few cows other than my own at \$250 each—no charge for keep. I shall be pleased to show the stock to all persons interested. Send for catalogue to

CHAS. E. COFFIN,

Muirkirk, Prince George's Co., Md.

FERRETS FOR SALE.

Ferrets, for Rat catching, from imported stock, price \$10 each, or \$20 per pair, boxed and delivered at Express Office. Apply to

CHAS. E. COFFIN,

my-12t

Muirkirk, Prince George's Co., Md.



My business is to supply what every farmer of experience is most anxious to get, *perfectly reliable* Vegetable and Flower Seed. With this object in view, besides importing many varieties from reliable growers in France, England and Germany, I grow a hundred and fifty kinds of vegetable seed on my four seed farms, right under my own eye. Around all of these I throw the protection of the three warrants of my Catalogue. *Of new vegetables I make a specialty*, having been the first to introduce the Hubbard and Marblehead Squashes, the Marblehead Cabbages, and a score of others. My Catalogue containing numerous fine engravings, taken from photographs, sent *free* to all.

Jan-4t **JAMES J. H. GREGORY, Marblehead, Mass.**

Guano!

C. W. BURGESS & SON,

166 North Gay Street, Baltimore,

DEALERS IN

**MEXICAN AND PERUVIAN GUANO,
PHOSPHATES, &c., and**

FERTILIZERS OF ALL KINDS.

Especially Mexican Guano a Specialty.

Which they offer for sale at the lowest market rates. From the satisfaction expressed as to the quality of the Fertilizers furnished by us, we feel confident that we can give the purchaser the full value of his money. Give us a call before purchasing.

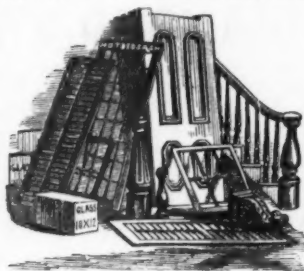
Especially Country Produce bought and sold.

Especially Also, GROCERIES OF ALL KINDS.

Feb-1y

Jno. W. Wilson & Sons,

LUMBER



DEALERS

AND MANUFACTURERS OF

**Sashes, Doors, Blinds, Mouldings, Brackets,
Handrails, Newels, Balusters, and other
Building Materials—on hand at reduced prices.**

333 SOUTH EUTAW STREET,

Corner Cross st.

[sep-1y]

BALTIMORE, MD.

SMITH & CURLETT,

Steam Soap & Candle Works,

PERFUMED CHEMICAL OLIVE SOAPS,

ADAMANTINE and TALLOW CANDLES,

Cor. Holliday and Pleasant Sts.

Feb-1y

BALTIMORE, MD.

WANTED.—A reliable white man, with a small family, to go to South Carolina, to take charge of a Dairy and Garden. There is a fine Spring house on the place, with some twelve cows in milk; and there are four or five acres in veg. tables, fruits, &c. The situation is near a flourishing village, where all the extra butter and milk, vegetables, fruits, &c., can be advantageously sold. To the right kind of a man good wages would be paid, or an interest given in the profits. This is a good opening for an active honest man. Address, for further particulars, EDITORS OF THE AMERICAN FARMER, Baltimore, Md. dec-1f

PATTERSON DEVONS.



Having on hand a superior lot of young DEVONS from 6 to 18 months old, bred from the Patterson Herd, I am prepared to fill orders at reasonable prices.

S. T. C. BROWN,

Sykesville, Maryland.

Oct-6t

THE AMERICAN FARMER.

THE TAYLOR MANUFACTURING COMPANY, MANUFACTURERS OF

Taylor's Rotary Engine,

(PATENTED MARCH 29, 1873.)

This Engine is adapted to any place where power is needed. For hoisting purposes, vessels, boats, &c. Some of its advantages are: First—Simplicity. Second—The *small* space it occupies, one of twelve-horse power occupying only two feet square space. Third—It reverses INSTANTLY, turning either way at will of operator. Fourth—It has *no dead center*. Fifth—It requires *less* steam, consequently less boiler room for same amount of horse-power.

CIRCULAR SAW MILLS,

SINGLE AND DOUBLE.

Adapted to *any mill site*. Built out of the *best material*. *Strong, durable and easily operated*. SOLD ON EASY TERMS.

DIAMOND STATE SEPARATORS.

We claim *simplicity, durability and capacity to do good work* in all kinds of grain, and with *any kind of power*, from two or three-horse tread, six or eight-horse sweep power, or a four or six-horse engine. First—Its separating the straw from the grain is *perfect*. It has no rakes or beaters. Second—Its riddles, which are *entirely different* from any machine in the market, make its cleaning of grain entirely free from straw, &c., and fit for market. Third—It has a feeder's duster which protects the feeder from the dust. Fourth—It is the simplest machine built; has only two belts, is easily handled and *runs tighter* than any machine doing the same amount of work.

Westminster Triple-Geared Power:

Simple and compact, runs light, has a quick motion, mounted on wheels or down.

IMPROVED HARMAN HORSE-RAKE

Is easily operated by a boy; does not dig and scratch the soil, and in grass or grain has no superior. Runs light and is built in the best manner. We solicit a trial.

Lime and Fertilizer Spreader

Will spread LIME, PLASTER, ASHES, FERTILIZERS AND FINE MANURES, and drill in rows if desired. Will spread from 5 to 100 bus. Lime per acre, as desired. It is built in the best manner, and will spread as much in a day with a boy and a pair of horses as fifteen men by hand; while it has no equal in the evenness of its spreading. Every machine warranted. We have the most flattering testimonials of its utility.

HOMINY MILLS,

SELF-SHARPENING GRIST MILLS,

CORN CRUSHERS,

WOOD AND TABLE SAWS,

FORCE PUMPS,

PLOWS OF ALL SIZES,

MILL MACHINERY, &c., &c.

We also sell THE EXCELSIOR PORTABLE AND AGRICULTURAL ENGINE. Heater inside boiler, (no freezing of pipes,) cylinder incased with steam, consequently using *dry steam* instead of wet steam. Has *more good points* than any *Portable or Agricultural Engine* in the market. STATIONARY ENGINES of most approved styles. Return *Tubular Boilers*, all sizes. REAPERS, MOWERS, &c.

SEND FOR CIRCULARS. AGENTS WANTED.

Address

Taylor Manufacturing Co.

Jan-17

Westminster, Md.

SOLUBLE SEA ISLAND GUANO.

In again offering our Soluble Sea Island Guano to the agriculturist, we can but reiterate what we have said on former occasions, that we have spared no expense in obtaining the views and experience of the best chemical talent of Europe and America; and our life-long occupation in the Fertilizing business enables us, we claim, to afford the Planter an advantage that but few can offer. We obtain our material in all their purity from the slaughtering establishments of the West, and by direct importations from Europe, which are most thoroughly dissolved and combined as our experience teaches, affording the most soluble and efficient source of plant food in its most concentrated form, and without the slightest probability of loss, as is the case with articles containing ammonia in a volatile form. Our Guano, appertaining closely to stable manure in its action, must pass through the same process of decomposition, absorbing the same moisture, and evolving the same gases, is necessarily an effective fertilizer—as every Planter can testify to the value of such manure.

Opinion of Prof. P. B. WILSON, late assistant to the great German Chemist BARON J. VON LIEBIG.

Chemical Laboratory, No. 30 Second Street, Baltimore,
November 29th, 1872.

Messrs. R. W. L. RASIN & Co.,

Gentlemen:—The success attending the experiments made with the Soluble Sea Island Guano have clearly demonstrated that the views expressed to you in my letter in January last have been fully confirmed.

1st. The importance of having the bone phosphate of lime as completely decomposed as possible by converting it into soluble phosphate, presenting the plant its food in so acceptable a form that, notwithstanding drought and the want of other chemical and physical influences in the soil, the vitality and strength of the roots are not overtaxed either in decomposing the insoluble constituents entering them as food elements, or extending their growth beyond natural limits in seeking nourishment, thereby impairing the yield of fruit or seed as may belong to the nature of the plant.

2d. That you have presented a fertilizer stimulating the plant as needed with the constituents of such a character and chemical combination as to retain the moisture of the soil; and during excessive droughts, such as we have just passed through, to absorb it from the atmosphere and retain the beneficial effects of nitrates and carbonates of ammonia in the dews, when fertilizers into which Peruvian Guano enters as a component must fail from excessively stimulating the plant by forcing a vigorous and succulent growth, composed almost entirely of carbon and water, with an absence of the proper mineral constituents to give strength and vitality to the plant to mature.

By a strict adherence to chemical laws you have obtained a fertilizer which not only presents the crop with its constituents in the most acceptable form ready for assimilation, but counteracts and compensates for many of the deficiencies to complete development occasioned by protracted drought.

Respectfully, &c.,

P. B. WILSON,

Analytical and Consulting Chemist.

Send for Circulars containing opinions of Prof. Augustus Volleker, of Royal Agricultural Society of England, and others of equal prominence, and Certificates of Farmers who have used the Guano for years.

**Animal Matter and Pure Ground Bones, German Potash Salts of our own
Importation in Store and for Sale.**

**R. W. L. RASIN & CO.,
No. 32 South Street,
BALTIMORE.**

R. J. BAKER.

R. J. HOLLINGSWORTH.

R. J. BAKER & CO.,
IMPORTERS AND DEALERS IN
DYE-WOODS, DYE-STUFFS,
OIL VITRIOL,
PURE GROUND BONES AND CHEMICALS,
FOR MAKING
SUPER-PHOSPHATES AND FERTILIZERS,
Glue, Indigo, Madder, Bi-Carbonate of Soda, &c.
Nos. 36 and 38 South Charles Street,
BALTIMORE, MD.

WILSON & CO.,
63 SECOND STREET, BALTIMORE,
MANUFACTURERS OF
FIRE AND WATER PROOF
IMPROVED PLASTIC SLATE ROOFING
AND DEALERS IN
ENGLISH ROOFING FELT.

The PLASTIC SLATE IMPROVED, as a roofing material, stands unrivalled. As a mastic it adapts itself to every SHAPE and SLOPE, NON-COMBUSTIBLE, IMPERVIOUS, NON-EXPANSIVE and UNDECAying FROST does not CRACK nor HEAT DISSOLVE it, possessing all the advantages of a sheet slate roof without its joints and crevices. Perfectly FIRE PROOF, and insures at same rates as slate or metal roofs. It is unequalled as a coating for RAILROAD and FARM BUILDINGS.

LEAKY SHINGLE ROOFS.

It frequently happens that house owners wish to avoid the expense of taking off shingles and running the risk of uncovering the house. To accomplish this we recommend the use of the **ENGLISH ROOFING FELT**, which by far supercedes the common tarred paper. It has been proved by experience that roofs covered in this manner will stand for YEARS in places where other roofing materials have FAILED.

OLD METAL ROOFS can be covered with this material, making them to last many years, and more durable than several successive coats of paint, at half cost of a new roof.

FOR DAMP WALLS, as a remedy, it is unequalled and an entire success.

Orders for shipping promptly attended to.

WILSON & CO.,
No. 3 Rialto Building,
63 SECOND STREET, BALTIMORE.

jan-ly

THE AMERICAN FARMER.

MACKENZIE BROS.,

Importers, Manufacturers and Dealers in

SADDLERY HARDWARE AND COACH FURNITURE,

Oils, Paints, Varnishes, Iron and Steel Carriage Bolts,

Horse-Covers, Lap Rugs and Fly Nets,

Saddle-Trees, Wood Stirrups, Gum Horse Covers.

Depot and Baltimore Agents for Philadelphia

Axle Works and Henry's Patent One-Plate Springs.

338 W. BALTIMORE STREET,

dec-1y

Baltimore, Maryland.

ESTABLISHED 1835.

GEORGE W. WEBB, GOLDSMITH & JEWELLER,

S. E. Corner Light and Baltimore Streets,

IMPORTER AND DEALER IN

FINE WATCHES, RICH JEWELRY,

STERLING SILVER AND PLATED WARE.

Every attention paid to neatness and durability in the manufacture and repair of Jewelry. Fine Watches repaired by experienced workmen. Hair Braiding in all its varieties. Orders attended to with despatch. dec-1y

WE HAVE HESITATED ABOUT BREAKING THE MARKET, BUT THERE IS NO HELP FOR IT. WE HAVE OVER \$100,000 IN MEN'S AND BOY'S

CLOTHING

AND GOODS FOR MEN'S WEAR,

And we cannot afford to carry them. Good times are coming, but we cannot sell Winter Clothing in Summer time, any more than people can wear Summer Clothing in Winter time; and besides, we will not allow our stock to become old.

J. H. SMITH & CO.

MARBLE HALL BUILDINGS, N. E. COR.

dec-1y

BALTIMORE AND FREDERICK STREETS.

THE MALTA JACK ALVARADO

Is of medium size, in his prime, gentle, in full vigor. Colts extra fine. Able to clear his cost every year. Will be sold for one-third his value if taken soon. Also, for sale IMPORTED JERSEY CATTLE, full points, solid colors.

A. D. NEWELL, M. D., Clifton Stock Farm,
dec-2t New Brunswick, N. J.

SCALES.—Every farmer should have a pair of scales. We can furnish them to weigh a quarter of an ounce up to the largest hay wagon, on very liberal terms, at the *American Farmer* office. jan-1f

Pure Essex Figs,

Bred from stock which I have recently imported direct from England and Canada; also,

**Light Brahma, White Leghorn and Game
Dominique Fowls,**

Each variety bred from the purest stock in this country, and warranted to be first-class in every respect. All for sale on reasonable terms for Breeding or Exhibition purposes.

T. J. Wooldridge, M. D.,
oct-6t French Hay P. O., via Glen Allen, Va.

THE AMERICAN FARMER.

IMPORTANT TO FARMERS.

J. G. HEWES'

Ammoniated Bone Super-Phosphate of Lime,

Manufactured and Sold by **JOHN G. HEWES,**

Office and Warehouse, 370 WEST PRATT ST., BALTIMORE, MD.

Also, PERUVIAN GUANO, and Bones of all grades.

July-1y

Washington Life Insurance Co. OF NEW YORK.

CYRUS CURTISS.....PRESIDENT.

Assets January 1, 1873.....\$3,426,203 27

Liabilities—Cash reserved for Policies,

\$2 913,102 00

Liabilities for Claims due, 70,141 74 2,983,243 74

SURPLUS.....\$442,959 53

PLAN OF BUSINESS.

Premiums required in Cash.

Dividends are non-forfeitable and are paid in Cash.

Assets are held in Cash.

Policies are paid in Cash.

The first question for a prudent man to ask, in determining the merits of an Insurance Company, should be: 1st—Is it trustworthy and responsible? The entire history of this Company has shown that its solidity is unquestioned; no imputation to the discredit of its management having ever been uttered.

DAN'L GRANT EMORY,

Manager for Maryland and District of Columbia,

my-1y 32½ ST. PAUL STREET, BALTIMORE, MD



B. T. HYNSON & SONS, Paper Hangings and Window Shades, WINDOW AWNINGS, MOSQUITO AND FLY-NETS.

Wall Papers and Window Shades of all grades and styles. Workmen sent to all parts of the country. Just received a choice assortment of different styles. Venetian Blinds made and repaired.

B. T. HYNSON & SONS,

sep-1y

No. 54 N. Howard St., Baltimore, Md.

VIRGINIA LANDS.

UPPER JAMES REAL ESTATE AGENCY,

BY WILLIAM HOLMAN,

CARTERSVILLE, Va.

Who offers for sale upwards of 12,000 acres of land, lying in one of the most desirable regions of Eastern Virginia.

Catalogues sent on application.

my-tf

M. PERINE & SONS,

Manufacturers of

Flower Pots, Stone and Earthenware,

Also, FIRE BRICK for COAL STOVES.

POTTERIES and SALES ROOM,

No. 711 & 713 W. BALTIMORE ST.

Baltimore, Md.

Fowl Fountains of all sizes always on hand. mar-12t

WM. STUART SYMINGTON.

THOS. A. SYMINGTON.

PATAPSCO CHEMICAL WORKS.

SYMINGTON BROS. & CO.
MANUFACTURERS OF

OIL VITRIOL AND OTHER CHEMICALS.

Works on Locust Point, }
Office, 44 South Street, } Baltimore.

\$1.000 REWARD
For any case of Blind,
Bleeding, Itching or Ul-
cerated Piles, that **CE-
BING'S PILE REMEDY**
fails to cure. Prepared
expressly to cure Piles
and nothing else. Sold by all Druggists. Price \$1.

FOUTZ'S CELEBRATED Horse and Cattle Powders.



This preparation, long and favorably known, will thoroughly re-invigorate broken down and low-spirited horses, by strengthening and cleansing the stomach and intestines.

It is a sure preventive of all diseases incident to this animal, such as LUNG FEVER, GLANDERS, YELLOW WATER, HEAVES, COUGHS, DISTEMPER, FEVERS, FOUNDER, LOSS OF APPETITE AND VITAL ENERGY, &c. Its use improves the wind, increases the appetite—gives a smooth and glossy skin—and transforms the miserable skeleton into a fine-looking and spirited horse.



To keepers of Cows this preparation is invaluable. It is a sure preventive against Rinderpest, Hollow Horn, etc. It has been proven by actual experiment to increase the quantity of milk and cream twenty per cent. and make the butter firm and sweet. In fattening cattle, it gives them an appetite, loosens their hide, and makes them thrive much faster.

In all diseases of Swine, such as the Lungs, Liver, &c., this article acts as a specific. By putting from one-half a paper to a paper in a barrel of swill the above diseases will be eradicated or entirely prevented. If given in time, a certain preventive and cure for the Hog Cholera.



**DAVID E. FOUTZ, Proprietor,
BALTIMORE, Md.**

For sale by Druggists and Storekeepers throughout the United States, Canada and South America.



Italian Bees,
IMPORTED AND HOME-BRED.
Send for Circular. E. J. PECK, Linder, N. J.
USE AUTOMATIC BEE FEEDERS. mar-17

THORNBURG & M'GINNIS' LIME AND FERTILIZER SPREADER,

PATENTED 1873.

This machine spreads chip manures, fine barn-yard manures, and broadcasts lime, plaster, ashes and super-phosphates; and also drills the same in rows any desired distance apart, taking two rows at a time, at rates of any quantity per acre down as low as one bushel. It also broadcasts small grains with fertilizers on lands too rough for the drill.

THORNBURG & M'GINNIS,

aug-17

Willow Grove Springs, Woodstock, Va.

EAST CHESTER NURSERIES. FRUIT TREES,

ORNAMENTAL TREES,
BEDDING PLANTS, &c.

Grape Vines, Raspberries, Strawberries and other Small Fruits.

HARDY HERBACEOUS PLANTS.
SEND FOR PRICE LIST.

J. W. COBURN & CO.

mar-17

East Chester, N. Y.

MANUFACTURERS OF PURE

No. 1 GROUND PLASTER.

C. S. & E. B. FREY,

No. 18 HARFORD AVENUE, BALTIMORE, MD.

And dealers in Corn Husks. Always buying and pay the HIGHEST CASH PRICE

FOR CORN HUSKS. feb 12t

S. E. TURNER & CO.

STATIONERS AND BLANK BOOK
MANUFACTURERS.

Dealers in WRITING, PRINTING AND WRAPPING
PAPERS, ENVELOPES, TWINES, BAGS, &c., &c.

No. 3 S. Charles Street,

july-17

BALTIMORE, MD.

THE AMERICAN FARMER.

JOHN D. HAMMOND.

HENRY A. ANTHONY.

JOHN D. HAMMOND & CO.
Saddle, Harness, Trunk and Collar
Manufacturers,
WHOLESALE AND RETAIL.
No. 361 W. Baltimore Street, opposite "Eutaw House,"
BALTIMORE.

sep—1y

A. E. WARNER,
Manufacturer of
Silver Ware, Rich Jewelry,
Watches, Diamonds, Jewelry, Silver Ware.

Importer and Dealer in
Diamonds, Fine Watches, Silver Plated Ware, Table Cutlery,
Fancy Articles, &c.

No. 135 W. BALTIMORE STREET, BALTIMORE, MD.

FINE BRONZES AND OPERA GLASSES. SOLID SILVER WARE OF OUR
je—1y OWN MANUFACTURE.

HARRINGTON & MILLS,

Nos. 204 & 206 BALTIMORE STREET, BALTIMORE, MD.

Manufacturers and Importers of

Fine Furniture, Looking Glasses, Gilt Frames, Curtains and Draperies.

We call particular notice to our large stock of **CANE FURNITURE**, embracing
Chairs, Tables, Lounges, &c., &c.; being particularly suitable for country residences, and adapted,
from its lightness and coolness, for Southern latitudes.

A large stock of Fine Furniture constantly on hand and made to order.

may—1y.

MARYLAND BRITANNIA
AND
GOLD AND SILVER PLATE WORKS.
ESTABLISHED 1850.

WM. HOLMES,
SALES ROOM.....No. 3 NORTH CHARLES STREET.
Office and Factory, Nos. 50 and 52 Holliday Street,
BALTIMORE, MD.

Repairing and Replating done so as to look equal to new ware.

may—1y.

HUGH SISSON, STEAM MARBLE WORKS,

Cor. North and Monument Sts., Baltimore, Md.

**MANTELS, MONUMENTS and STATUARY,
GRAVESTONES AND TABLE TOPS,**

MARBLE COUNTERS, for Banks, Hotels and Druggists,

TILES FOR FLOORS, GARDEN STATUARY, constantly on hand,
feb-1y AT THE LOWEST PRICES.

IMPORTANT TO FARMERS, DAIRYMEN and COUNTRY MERCHANTS!

FLETCHER E. MARINE, GENERAL COMMISSION MERCHANT,

ESTABLISHED 1855,

No. 45 West Pratt Street, Baltimore, Md.

Dealer in Flour, Meal, Grain and Feed, Hay and Straw, Dried Fruit, Butter and Cheese, Guano
and other Fertilizers: also Lumber, Staves and Tan Bark.

Consignments of produce, &c., respectfully solicited. Our charges are only the customary commission and the legitimate expenses of transportation and handling in the city.
20,000 bushels of ASHES on hand.

FLETCHER E. MARINE,

oct-1y

No. 45 W. Pratt Street, Baltimore, Md.

IMPORTANT IMPROVEMENT IN FERTILIZERS. GERMAN POTASH SALTS,

Imported directly from the mines, high and low tests.

Orders of Manufacturers promptly executed in deliveries to suit.

STOCK ON HAND FOR SALE VERY CHEAP.

Muriate of Potash, Kainit, &c.

Also for sale, GROUND BONE, guaranteed strictly pure, testing 4.142 Ammonia, 47.010 Bone
Phosphate of Lime, GUANO, &c. PLEASE CALL FOR CIRCULARS.

TATE, MÜLLER & CO.

oct-1y

52 S. Gay St., Baltimore, Md.

D. KNOX, late of R. Sinclair & Co.

WILLIAM DICKSON.

D. KNOX & CO.

DEALERS IN

AGRICULTURAL IMPLEMENTS AND MACHINERY.

GROWERS AND IMPORTERS OF

Garden, Field and Flower SEEDS, Trees, Plants, Fertilizers, &c.

Agents for DOTY'S WASHING MACHINES, CUCUMBER PUMPS, MONTGOMERY'S WHEAT FAN,
"SUPERIOR" MOWER AND REAPER.

No. 2 Howell's Block,

oct-12t

CAMDEN STREET, NEAR SHARP, BALTIMORE, MD.

THE AMERICAN FARMER.

JOHN C. HACHTEL & CO.,
MANUFACTURERS OF
HACHTEL'S AMMONIATED SUPERPHOSPHATE,
PURE DISSOLVED BONE, and
TOBACCO FERTILIZER.

These brands are prepared from the best materials which can be obtained, and contain in a soluble condition every element necessary to the growth of the plant and the formation of the grain. Rich in Ammonia, Soluble Phosphates and Potash—always in fine dry condition for the drill. Orders respectfully solicited. We also deal in KAINIT, (Potash Salts,) which we recommend as a top-dresser for all crops, in addition to Phosphates or Bone.

dec-ly

OFFICE—27 South street, Baltimore, Md.

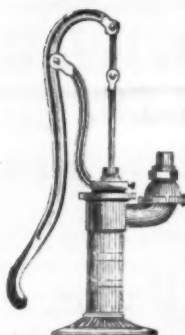
JAMES L. FREY.

GEORGE E. BOWERS.

JAMES L. FREY & CO.
MANUFACTURERS OF
Spring, Hair, Husk and Cotton MATTRESSES,
Feather Beds, Pillows, Bolsters, &c.
No. 84 W. BALTIMORE STREET,
Between Gay and Holiday Streets, **Baltimore, Md.**

FACTORY—S. E. CORNER CHEW AND CAROLINE STREETS.

Old Feather Beds Steamed. Steamboats, Hotels, &c., furnished at the Lowest Prices.
dec-ly



HUBBALL & DUNNETT,
HYDRAULIC ENGINEERS,
6 & 8 N. Liberty St., and 171 N. Eutaw St., Baltimore.

Public and Private Buildings Heated by Steam or Hot Water; Plumbing of every description, with Lead, Galvanized or Plain Iron Pipe; hot and cold water; Hydraulic Machines, various patterns, simple in construction and durable, viz: Steam Pumps, positive action: Hot Water Pumps, Acid Pumps, Double Action Pumps, Brass and Iron; Water-Wheel Pumps, Water Rams, Wind Mill Pumps, Horse-Power Pumps, Steamboat Pumps for extinguishing fire; Springfield Gas Machines for lighting Country Houses, Hotels, Factories and Railroad Stations, &c., &c.

Having experienced workmen in our employ, any work entrusted to our care will be promptly and satisfactorily done.

We have the privilege to refer to the following gentlemen as to our capability to do the above work: Hon. Reverdy Johnson, Hon. Henry G. Davis, Hon. Wm. Pinkney Whyte, Francis T. King, Esq., J. H. B. Latrobe, Esq., Samuel G. Wyman, Esq., William G. Harrison, Esq., William W. Taylor, Esq., John Gregg, Esq., Wm. F. Burns, Esq., J. W. Allnutt, Esq., Messrs. Baldwin & Price, Architects.
dec-ly

GEORGE PAGE & CO.,
Machinists and Founders.

Portable and Stationary Steam Engines and
Boilers, Patent Portable CIRCULAR SAW MILLS,
Portable Grist Mills, Horse Powers, Leffel's
Turbine Water Wheel, &c.

No. 5 N. SCHROEDER STREET, near W. Baltimore street,

feb-ly

BALTIMORE MD.

BURNS & SLOAN,
No. 132 Light Street Wharf,
BALTIMORE, MD.

BUILDING LUMBER AND SHINGLES,
ASH, OAK AND WALNUT.
Lime, Bricks, Sash and Mill Work.

oct-19t

NOAH WALKER & CO.

THE

Celebrated Clothiers

OF BALTIMORE, MD.

Announce the introduction of a plan of ordering

CLOTHING AND UNDERWEAR BY LETTER,

To which they call your special attention. They will send on application their improved and accurate **RULES FOR SELF-MEASUREMENT**, and a full line of samples from their immense stock of

Cloths, Cassimeres, Coatings, Shirtings, &c. &c.

A large and well-assorted stock of **READY-MADE CLOTHING** always on hand, together with a full line of **FURNISHING GOODS**.

NOAH WALKER & CO.

Manufacturers and Dealers in Men's and Boys' Clothing and Furnishing Goods, either Ready-Made or Made to Order.

165 and 167 W. BALTIMORE STREET, Baltimore, Md.

oct-1y

FOR SALE,

A VALUABLE AND ATTRACTIVE

FARM ON TIDE WATER, VA.

The subscriber offers for sale his Farm in Northumberland Co., Va., comprising about 1600 ACRES OF LAND situated on the Potomac and Cone Rivers. All the Farm is River-bottom land, adapted to grain and grass culture, and particularly desirable for trucking and fruit raising—the soil being well suited for all kinds of vegetables as well as the staple crops. There are 1000 acres arable land, the balance in valuable timber of all kinds. Attached to the Farm are invaluable Oyster coves, noted as producing the finest Oysters of this section. There is a wharf on the property and three steamers from Baltimore and Washington land there every week, with the prospect of a daily line to Point Lookout, Md.—13 miles across the Potomac—upon the completion of the Southern Md. R. R. The time to either Baltimore or Washington only 8 hours. The improvements consist of a good **BRICK DWELLING** of four rooms, smoke, dairy and poultry houses, barn, granary and corn cribs, and three outbuildings, of four rooms each, for laborers. The whole place is under good chestnut fencing, and thoroughly drained. The Farm will be sold entire, or if found desirable will be divided into parcels of, say, 50 acres, more or less. It is well situated for such division, and, in that event, will offer very superior inducements to purchasers. Terms will be made liberal. Parties desiring to inspect the land can take the steamers either at Baltimore or Washington, and land on the Farm.

For further particulars, address the Editors of the "American Farmer," Baltimore, or

DR. JAMES SMITH,
Heathville, Northumberland Co., Va.

The GERRISH CABINET ORGAN,

In Imperial cases, with flexible sliding covers,

New style, and *Superior in Tone and Touch to all other Organs*. At very low prices. Send for Circulars and Price list to **JAMES M. DEEMS, AGENT, corner Baltimore and Paca streets, over the People's Bank, BALTIMORE, MD.**

oct-1y.

William Harris,
Guns and Pistols.

With large assortment of

SPORTSMEN'S GOODS.

Guns neatly Stocked and Repaired at

No. 116 PRATT STREET,

One door from South St. [sep-6t] **BALTIMORE, MD.**

LEWIS TUDOR & CO.
No. 44 LIGHT STREET,

Third door below Lombard St.,

BALTIMORE, MARYLAND.

COMMISSION MERCHANTS for the sale of GRAIN, BUTTER, EGGS, CHEESE, Green and Dried FRUITS, Vegetables and Country Produce generally. Also, an assortment of reliable FIELD and GARDEN SEEDS constantly on hand. Consignments solicited and prompt returns made.

mar-1y

THE AMERICAN FARMER.

MORO PHILLIPS'
GENUINE IMPROVED
SUPER-PHOSPHATE OF LIME.
STANDARD GUARANTEED.

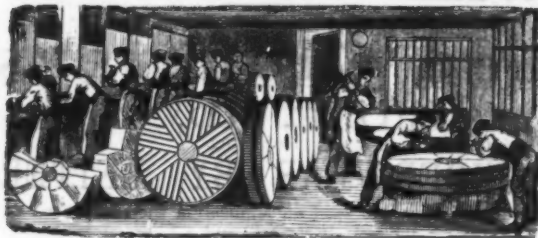
Reduced in price, and improved in quality by the addition of Potash. This article is already too well known to require any comments upon its Agricultural value. Thirteen years' experience has fully demonstrated to the agricultural community its lasting qualities on all crops, and the introduction of Potash gives it additional value.
PRICE \$50 PER TON, 2,000 LBS. Discount to Dealers.

PURE PHUINE.

SUPERIOR TO PERUVIAN GUANO. Patented April 29, 1860. Manufactured by MORO PHILLIPS.
PRICE \$50 PER TON, 2,000 LBS. Discount to Dealers. For sale at Manufacturer's Depots:

110 S. DELAWARE AV., Philadelphia, Pa.
95 SOUTH STREET, Baltimore, Md.

And by Dealers in general throughout the country. Pamphlets mailed free on application.
ap-1y **MORO PHILLIPS, Sole Proprietor and Manufacturer.**



Best quality ANKER BRAND, by the piece or cut to order, and sent by express to any Station or Steamboat or Railroad lines. SMUT MACHINES, BELTING and Mill Furnishing Goods generally.

WEST FALLS AVENUE.

NEAR PRATT STREET BRIDGE.

BALTIMORE
RETORT AND FIRE BRICK WORKS.
GEORGE C. HICKS & CO.

MANUFACTURERS OF

CLAY RETORTS, TILES, FIRE BRICK,
VITRIFIED STEAM-PRESSED
Drain and Sewer Pipe, Stove Lining, &c.

ap-1y **Manufactory, Locust Point, Balt. Office, 4 S. Holliday St.**

DANA BICKFORD'S
NEW IMPROVED
FAMILY KNITTING MACHINE

Perfection in work and simplicity of construction have been attained in this Machine. It knits both circular and flat web with perfect selvage edge, making a perfect hand-stitch. It narrows and widens, knitting heels and toes of stockings to perfection, with ribbed or plain stitch, and is a Crocheting as well as Knitting Machine. It makes all the intricate fancy stitches of the crocheting-needle better than hand-work. It is so simple that a child can operate it, and the rapidity of its work is truly wonderful—40,000 stitches per minute.

This Machine has carried the FIRST PRIZE at the Maryland State Fair, Maryland Institute and Virginia State Fair this Fall, and was the principal attraction at all of them. They are more valuable in the Family than the Sewing Machine. Price \$25 and \$35. Send for Circulars. Agents wanted in every part of Maryland. Liberal terms. Address,

J. A. HAMILTON, General Agent for Maryland.
may-1f 47 NORTH CHARLES STREET, Baltimore.

THE CHAMPION
EARTH CLOSET.

Having selected the new CHAMPION as being the very best and cheapest EARTH CLOSET made, and accepted the Agency of it, I am now ready to furnish the public with five styles.

No farmer or person living in villages can afford to be without the Earth Closet. Looked at in the light of convenience, comfort and economy, it is far beyond the water closet, having all the advantages of the city water closet and none of its disadvantages, being perfectly without odor.

Send for Price-List and Circular to

J. A. HAMILTON,
47 N. Charles Street,
BALTIMORE.

may-1f

CANFIELD, BRO. & CO.
WATCHES,
DIAMONDS AND RICH JEWELRY,
SILVER AND PLATED WARE,
American, English and Swiss Watches,
GOLD, JET, TORTOISE SHELL, CORAL AND VULCANITE
JEWELRY,
CLOCKS AND BRONZES, LEATHER GOODS,
Fans, Opera Glasses and Fancy Goods.

THE LARGEST HOUSE IN THE CITY.
PREMIUMS FOR AGRICULTURAL FAIRS FURNISHED.
BADGES AND MEDALS FOR COLLEGES AND SCHOOLS A SPECIALTY.
WATCHES CAREFULLY REPAIRED.

CANFIELD, BRO. & CO.,

July-1y *Corner Baltimore and Charles Streets, Baltimore, Md.*

V. O. EARECKSON,
LUMBER DEALER,
West Falls Avenue, first Yard South of Pratt St. Bridge.
Building Lumber, Shingles, Laths, Palings,
FENCING. & c.
LIME, BRICKS, SASH, DOORS AND MILL WORK
may-1y **AT THE LOWEST PRICES.**

IMPORTANT!
PORTABLE GAS! PORTABLE GAS!

KUSTER'S NON-EXPLOSIVE GASLIGHT FLUID!

Cheapest, Safest and best Light in the World, giving a light equal to Coal Gas at the cost of one-half cent per hour! The Lighting of CHURCHES, HALLS and STORES a SPECIALTY. The **Petroleum Fluid Stove** is found superior in the satisfactory and rapid manner in which it does its work—always ready and under momentary control. For broiling Steak, Fish or Game it is unsurpassed. For Baking of Bread, Cakes and Pies, no oven with any other fuel in the world equals it. *Call and see for yourselves.*

C. F. KUSTER, { Successor to F. G. PALMER, and
late U. S. Portable Gaslight Co.,

my-12t

No. 9 South Gay Street, Baltimore, Maryland.

THE AMERICAN FARMER.

TO COTTON GROWERS AND TRUCKERS!

1874



1874

Composed of 800 pounds No. 1 Peruvian Guano and 1,200 pounds of Bones dissolved in Sulphuric Acid, Potash and Soda, forming the most universal crop-grower and concentrated durable Fertilizer ever offered to the farmer, combining all the stimulating properties of Peruvian Guano, and the ever-durable fertilizing qualities of Bones. Adapted for all soils and crops, and in *fine dry powder* for Sowing and Drilling in with the Seed. The most prominent farmers of Maryland and Virginia, after fifteen years' experience with "EXCELSIOR," pronounce an application of 100 pounds per acre, equal to 200 to 300 pounds of any other Fertilizer sold. **UNIFORMITY OF QUALITY GUARANTEED BY MANUFACTURERS.**

Look out for imitations and counterfeits. The popularity of Excelsior has induced *unscrupulous* parties in this and other cities to copy our trade-mark, and resort to other *dishonorable* means to sell their *worthless* compounds. **Price \$60 per Ton.**

dec-31

J. J. TURNER & CO., 42 Pratt St., Baltimore, Md.

JOHN C. DURBOROW,

GENERAL AGENT FOR

THE KIRBY MOWERS AND REAPERS,

55

Light street,

BALTIMORE,

MARYLAND.



55

Light street,

BALTIMORE,

MARYLAND.

The KIRBY COMBINED REAPER AND MOWER with BALTIMORE SELF-RAKE received FIRST PREMIUM at Carroll County, Frederick County and Montgomery County, Md., FAIRS, October, 1873. The BURDICK INDEPENDENT REAPER with BALTIMORE SELF-RAKE received FIRST PREMIUM and DIPLOMA at Maryland State Fair, 1873. The KIRBY TWO-WHEEL MOWER was awarded the FIRST PREMIUM at Carroll County, Frederick County and Montgomery County, Md., Fairs; and also, at Leesburg, Va., Fair, 1873.

SIMPLE, STRONG AND DUBABLE.

POSITIVELY NO SIDE DRAUGHT. NO WEIGHT ON THE HORSE'S NECK. Extras and repairs constantly on hand. Send for Circular and Price-List. Also, DEALER IN ALL KINDS OF

Agricultural Implements, Cucumber Pumps, Seeds, Fertilizers, &c.

JOHN C. DURBOROW,

dec-17

55 Light Street, near Pratt, Baltimore, Md.

**THE BAB COCK
AND WILCOX
PATENT SAFETY STEAM
BOILERS.**

**LEFFEL'S
AMERICAN DOUBLE
TURBINE
WATER WHEEL.**

**PORTABLE
AND STATIONARY
ENGINES & BOILERS
SAW & GRIST MILLS**

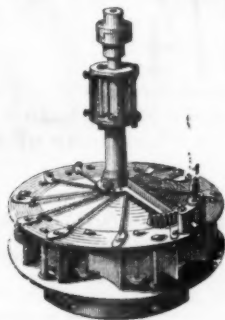
**MILL GEARING, SHAFTING, PULLEYS
& HANGERS, MANUFACTURED BY**

POOLE & HUNT,
Send for Circulars { **BALTIMORE, MD**

**LEFFEL'S
AMERICAN**

Double Turbine Water Wheel

*Power Pledged Equal to
any Overshot.*



OVER 6,000

NOW IN USE.

oct-1y

TREES AND PLANTS.

Rosebank Nurseries,

Govanstown, Balt. co., Md.

We invite the attention of Planters and Amateur Cultivators to our complete stock of the following:

PEARS, Standard and Dwarf.

APPLES, Standard and Dwarf.

CHERRIES, Standard and Dwarf.

PEACHES, PLUMS and GRAPE VINES, together with other SMALL FRUITS of popular kinds.

ORNAMENTAL TREES, EVERGREENS and SHRUBS, with ROSES in great variety. A large stock of choice GERANIUMS, VERBENAS, and other bedding-out plants.

75 to 100,000 two and three year old OSAGE ORANGE HEDGE PLANTS.

ORDERS BY MAIL promptly attended to.

Catalogues forwarded on application.

sep-1f

W. D. BRACKENRIDGE. nov-7t

**VICK'S
FLORAL
GUIDE
FOR
1874**

200 Pages; 500 Engravings, and Colored Plate. Published Quarterly, at 25 Cents a Year. First No. for 1874 just issued. A German edition at same price. Address, JAMES VICK, Rochester, N. Y.

RHODODENDRONS,

Camellias, Chinese Azaleas and Hardy Evergreens, Deciduous Trees and Shrubs, with Roses.

For Catalogues apply to

S. B. PARSONS & SONS,

Flushing, N. Y.

THE AMERICAN FARMER.

TO COTTON GROWERS.

J. J. TURNER & CO'S AMMONIATED BONE SUPERPHOSPHATE.

ANALYSIS.

Ammonia,	2.83
Soluble Phosphate of Lime,	29.51
Bone Phosphate of Lime,	10.67

Composed of the most concentrated materials, it is

**Richer in Ammonia and Soluble Phosphates
THAN ANY OTHER FERTILIZER SOLD.**

Uniform quality guaranteed. Fine and dry, in excellent order for drilling. Packed in bags.

PRICE \$50 PER TON.

J. J. TURNER & CO.,

42 Pratt Street, Baltimore, Md.

nov-31.

The Best.

KELLER PATENT GRAIN, SEED AND FERTILIZER DRILL.

We call the especial attention of all desirous of purchasing a drill this season to the above, and assure them that it is as its name implies—"The Best."

We claim it for Superiority:—1st,—In point of operation, being perfectly accurate in the distribution of Grain, Seed and Fertilizers. 2d,—In principle of Construction. 3d,—In Material. 4th,—In Finish. 5th,—In Simplicity and Ease of Management. 6th,—In Durability.

It has the "Keller Patent Sowing Arrangement," which is the only perfect force-feed made, and sows any quantity of Seed desired with accuracy.

Has Spring Hoes, and drills among stumps, stones, roots, and rough and uneven ground without interruption in its working arrangement, and with equal regularity under all circumstances.

Is regulated to sow either shallow or deep, and changeable by Lever, either straight or zig-zag, while in motion. The Patent Axle renders it the most steady and easiest running Drill, and it is at the same time self-greasing.

The Guano Attachment is perfect in every respect, with Reverse Feeders and Stirrers, works with perfect accurateness and guaranteed not to choke, adhere or pack. Grass Seed Attachment is placed behind the drill and hoes, hence no interference with the even distribution of the seed.

We solicit an examination of this Drill by all who intend buying.

Have also the Empire Thresher and Cleaner, with most approved Sweep Power, for 6, 8 and 10 horses. Steam Threshers and Portable Engines, Double-gear'd Railway Powers with Patent Governor; Combined Peerless Thresher and Cleaner. Also, Hickok Patent Portable Cider Mill and Presses, Hutchinson's Wine Mill and Press, Agricultural Machinery and Implements generally, Field and Garden Seeds, Fertilizers, &c.

GRIFFITH, BAKER & BRYAN,

41 and 43 N. Paca Street, Baltimore, Md.

sept-1y

THE AMERICAN FARMER.

FARMERS SAVINGS BANK!!

KNICKERBOCKER LIFE INSURANCE CO. OF NEW YORK.

ASSETS \$8,300,000.

ALL KINDS OF POLICIES ISSUED.


SAVINGS BANK INSURANCE A SPECIALTY.

Every Policy shows its cash surrender value at the end of the First, Second, Third and every year of the continuance of the Policy.

EXAMPLE.

ENDOWMENT—At 30, \$1000 payable at 40, or at previous death. Premium \$88.23. Cash surrender value at end of first year, \$77.74; at end of second, \$162.15; end of fifth year, \$440.02, or \$1.13 LESS than the amount paid in.

Payable at Death or 75—Age 40, \$1000. Premium \$34.01. Cash surrender value at end of second year, \$18; at end of third year, \$35.56.

 We respectfully call the attention of the public to the above card, and can assure them that no other Company offers so great an inducement for the investment of their money where so large a return is guaranteed, and brings LIFE INSURANCE WITHIN THE REACH OF ALL.

Parties desiring information or insurance in this Company will address or call upon the undersigned, who will take pleasure in furnishing it.

nov-1y

WM. E. BROWN & CO., Gen'l Agents, 22 Second St., Baltimore.

“THE CARROLLTON.”

This new and beautiful Hotel, located upon the site of “Old Fountain Hotel,” extended by an elegant front on Baltimore street, is convenient alike to the business man and the tourist.

It is the only Hotel in Baltimore of the new style, embracing

ELEVATORS, SUITS OF ROOMS, with BATHS,

And all conveniences; perfect ventilation and light throughout, and was planned and built as a Hotel, new from its foundation.

Its elegant and convenient Office and Exchange Room, with Telegraph, &c., will at all times be at the disposal of the merchants and citizens of the city.

The location of the Ladies' Entrance on Baltimore street, and the beautiful Drawing Rooms connected therewith, will give to families more than the usual degree of quietude and seclusion.

The undersigned refers to his career of over thirty years as a Hotel Manager in New York and Baltimore, and feels confident, that with a new and modern house, he can give entire satisfaction to his guests.

To accommodate Merchants and others who visit Baltimore, the proprietor will charge \$3 per day for the rooms on fourth and fifth floors, making the difference on account of the elevation. Ordinary transient rates for lower floors, \$4 per day.

R. B. COLEMAN, Proprietor.

BALTIMORE, Md.

[nov-1y]



HOUSE FURNISHING GOODS

FORWARDED AND PACKED

WITH

GREAT CARE

BY

SAMUEL CHILD & CO.

20 N. CHARLES STREET.

IMPORTERS OF CHINA, GLASS, TABLE CUTLERY,
FAMILY HARDWARE, PLATED GOODS, and
Dealers in TIN, WOODEN and JAPANNED
WARE and KITCHEN FURNI-
TURE of every character.

WATER COOLERS of our own make. ICE-CREAM
FREEZERS of the most approved kinds. PATENT ICE
PITCHERS, all qualities, and each warranted to be as
represented.

New and Beautiful Patterns of

ENGLISH, FRENCH AND AMERICAN

TABLE GLASSWARE.

WHISKEY, BRANDY AND

WINE DECANTERS,

SINGLE AND IN SETS.

BOWLS, DISHES, CELERY STANDS, &c.

Our arrangements made in person with the leading man-
ufacturers in Europe and this country, and having resident
agents in France and England, give us every advantage in
obtaining our supplies; manufacturing the common class
of goods, such as

TIN AND JAPANNED WARE;

Buying entirely for cash; with a thorough knowledge of
the business in all its details; purchasers may rest assured
that we can and will supply their wants as favorably and
upon as good terms as any house in New York or elsewhere.

We respectfully solicit a visit and an examination of
goods and prices.

ap-ly

Owners and Manufacturers

OF THE

New Iceland Refrigerator.

MONUMENT IRON WORKS.

DENMEAD & SON,

Cor. North and Monument Streets, Baltimore, Md.

MANUFACTURERS OF STATIONARY AND PORTABLE

Steam Engines and Boilers

OF ALL SIZES.

DAVID'S PATENT PULVERIZING MILLS, for Guanos, Bones, Ores, Clays;
also, Flour Making.

SEND FOR CIRCULAR.

ap-ly

GROVER & BAKER
SEWING MACHINE COMPANY,
17 N. Charles Street,
BALTIMORE, MD.

Buy one of their improved
"LOCK STITCH" or "ELASTIC STITCH"
Sewing Machines,
THE VERY BEST IN USE.

They combine the elements of
BEAUTY,
DURABILITY,
SIMPLICITY AND
USEFULNESS.

Either style embodies all the latest and most useful attachments and improvements.

The Grover & Baker Sewing Machine Company,

Is the only Company that afford the purchaser a Choice of Stitch.

They make Two Distinct Machines,

"Elastic" and "Lock-Stitch."

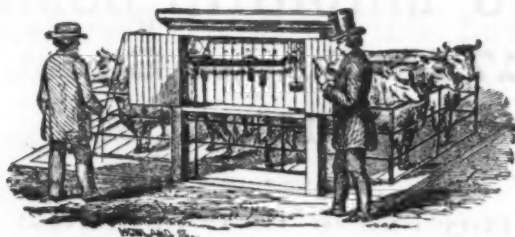
SALESROOMS—17 N. CHARLES STREET,

BALTIMORE.

THE AMERICAN FARMER.

STANDARD SCALES.

FAIRBANKS'



Hay, Stock and Cattle Scales.

CAUTION!

The well-earned reputation of our SCALES has induced the makers of imperfect Balances to offer them as "Fairbanks' Scales," and purchasers have thereby, in many instances, been subject to fraud and imposition. If such makers were capable of constructing good Scales they would have no occasion to borrow our name.

Buy only the Genuine Fairbanks' Standard Scales.
STOCK SCALES, COAL SCALES, HAY SCALES, DAIRY SCALES, PLATFORM SCALES,
COUNTER SCALES, &c.

**FOR SALE ALSO,
ALARM CASH DRAWER.**

Till-Tapping Prevented!

Every Drawer WARRANTED!

**EVERY MERCHANT
SHOULD USE THEM.**

Sold at all Fairbanks' Scale Warehouses.

FAIRBANKS & CO.,

sep-ly

No. 166 W. Baltimore Street, Baltimore, Md.



THOS. NORRIS & SON,

MANUFACTURERS AND DEALERS IN

Agricultural Implements,

Field and Garden Seeds, Fertilizers, &c.

Would call special attention to the following first-class Machines, &c.:

WESTLINGHOUSE THRESHERS AND CLEANERS.

AULTMAN & TAYLOR'S THRESHERS AND CLEANERS.

LEVER AND RAILWAY HORSE POWERS—most approved.

VAN WICKLE WHEAT FAN—Price \$37.

AMERICAN CIDER MILL AND PRESS—the best—\$40.

OUR NEW ACME PLOUGH.

Bickford & Huffman Grain Drills,

Plows, Harrows, Cultivators, Straw Cutters, Corn Shellers, and all kinds of Farming Tools. Fresh
Field and Garden Seeds, Pure Ground Bone and other Fertilizers.

CUCUMBER PUMPS,

WITH PORCELAIN-LINED IRON CYLINDERS.

We are prepared to furnish, wholesale and retail, the best and cheapest Cucumber Pumps in the country, to suit all purposes, from the small cistern to the deepest well.

Send for Descriptive Circular and Price List.

THOMAS NORRIS & SON,

141 Pratt Street, Baltimore, Md.

FOR HARVEST, 1874.

W. A. WOOD'S WORLD-RENOWNED

SELF RAKE REAPER,

WITH AND WITHOUT MOWING ATTACHMENT.

W. A. WOOD'S MOWING MACHINES,

Universally acknowledged as good as, if not superior to, any others in use. The above Machines have taken more **FIRST PREMIUMS** in this country and in Europe than any other Reaping and Mowing Machines extant. Send for Descriptive Circulars. For sale by

THOMAS NORRIS & SON, Agents,

may-17

141 Pratt street, Baltimore, Md.

THE AMERICAN FARMER.

Seasonable Agricultural Implements & Machinery

R. SINCLAIR & CO.,

62 LIGHT ST., BALTIMORE, MD.

MANUFACTURERS OF ALL KINDS OF

FARM MACHINERY

AND

Agricultural Implements

AND GROWERS AND IMPORTERS OF

Garden and Field Seeds, &c.,

OFFER FOR SALE A LARGE STOCK OF

LABOR-*SAVING* IMPLEMENTS AND MACHINERY.

Including in part, as particularly suitable for the coming Harvest,

The "Advance Mower" or "Improved Monitor,"

The simplest, strongest and most efficient Mower in the country.

**The "New Yorker" Self-Rake Reaper and
Mower and Reaper only.**

**Reapers of the most approved and Improved Patterns always on
hand.**

**ITHICA SULKY SELF-DISCHARGING HAY AND GRAIN RAKE, the best in use
"PHILADELPHIA" HAND AND HORSE MOWERS,**

ROGERS' PATENT HARPOON HORSE HAY RAKE.

"BUCKEYE" SULKY CULTIVATOR, for Corn, Tobacco and Cotton.

SINCLAIR'S SOUTHERN IRON BRACE GRAIN CRADLES.

HAY TEDDERS, most approved patterns.

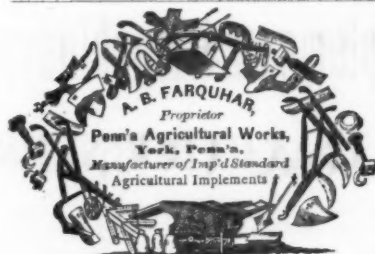
THOMAS' SMOOTHING HARROWS, for cultivating Corn, &c.

Also an unusually large and varied stock of well known and thoroughly tested MACHINES and IMPLEMENTS, which we guarantee to give satisfaction to Farmers and Planters.

R. SINCLAIR & CO.,

may-1y.

62 Light street, Baltimore.



PENNSYLVANIA Agricultural Works, YORK, Pa.

A. B. FARQUHAR,
MANAGER AND PROPRIETOR.

The Pennsylvania Agricultural Works is one of the most extensive establishments of its kind in the United States. It is furnished with improved Machinery, Foundry, Forging Rooms, Planing and Sawing Mills, Lumber Yard, &c., complete within itself. It is situated among the great Iron, Coal and Lumber fields, which form the basis of all manufacturing; and I would respectfully call the attention of the public to these advantages, confident of meriting an extended patronage.

The following are among the specialties:

AGRICULTURAL STEELS, PLOWS, CULTIVATORS, HORSE RAKES, PLOW HANDLES, THRESHING MACHINES, HORSE POWERS, &c. HORSE POWERS.

The Horse Power is one of the most important implements, and probably the most difficult to keep in order; too much care, therefore, cannot be used in selecting the very best.

I have long made the manufacture of Horse Powers a specialty, and can safely recommend my improved Iron Geared Powers to be all that I claim for them.

FARQUHAR'S CLIMAX HORSE POWER,

For Threshing, Ginning and General Farm Use,

ranks first; being the result of many years' labor, "practice with science," and the expenditure of thousands of dollars in experimenting.

It is remarkable for its light draft, simplicity, great strength and durability. It is fitted up with as much care as a piece of cotton machinery or steam engine, and will last as long. The rule, the "best is the cheapest," applies with special force to Horse Powers.

THE PELTON OR TRIPLE-GEARED IRON POWER.

This well known power is noted for its strength, cheapness and general efficiency. Like the Climax, the gearing is all secured in an iron frame, and is uninjured by the weather. The pinions are made of chilled iron, and no pains are spared to make it a first-class, cheap power.



Improved Railway Horse Powers, Threshers and Separators,

Have been a specialty with me for many years, and those who favor me with their orders may rely upon getting a machine which will run as light, waste less grain, and give more general satisfaction than any offered.

PLOW HANDLES.

Having improved Blanchard machinery for the manufacture of Plow Handles upon an extensive scale, I can supply first quality Handles, side bent to order for any pattern of plow.

For further particulars, address
july-1y

A. B. FARQUHAR, York, Pa.

THE AMERICAN FARMER.

ESTABLISHED 1839.

TO FARMERS, PLANTERS and GARDENERS

Pure Ground Bone

MANUFACTURED BY

JOHN BULLOCK & SON,

P. O. Box 636.

Washington Road, Baltimore, Md.

PACKED IN BARRELS OR BAGS, \$45 PER TON.

For the past thirty years we have been engaged in the manufacture of PURE GROUND BONE, our crude stock being gathered daily from the Butchers here, with whom we have yearly contracts. Having recently added additional and improved machinery, we are now prepared to fill all orders in our line with promptness and despatch. Would respectfully call attention to the annexed certificate:

BALTIMORE, March 1st, 1873.

Messrs. JOHN BULLOCK & SON, Baltimore, Md.

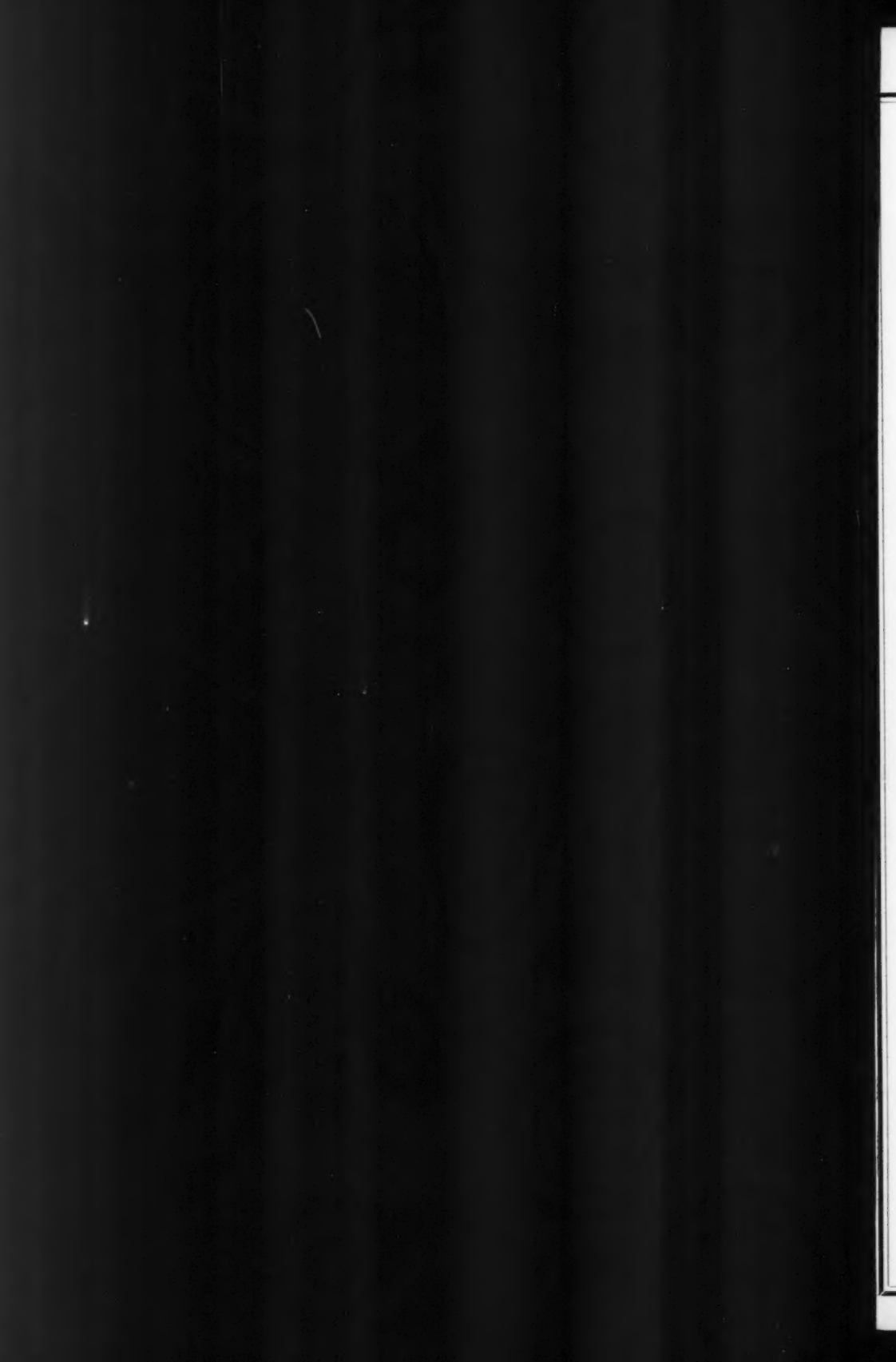
Gents—The following is the result of an analysis of your Ground Bone:

	PER CENT.
Moisture determined at 212° Fahrenheit,	5.44
Organic Matter,	39.16
Containing Nitrogen, 4.47 per cent., equal to Ammonia, 5.42 per cent.	
Inorganic Matter,	55.40
Containing Phosphoric Acid, 22.15 per cent., equal to Bone Phos. of Lime, 48.35 percent.	
Alumina, Oxide of Iron, and Carbonate and Fluoride of Lime not determined.	
Insoluble Residue, 3.61 per cent.	
	100.00

I am pleased to state that this is one of the richest and most available forms of Phosphate of Lime and Ammonia that can be found for agricultural purposes. The per centage of valuable ingredients named is in excess of the generality of fertilizers now being offered for sale. Respectfully, &c.,

P. B. WILSON,

Analytical and Consulting Chemist.



Established 1856.

LARMOUR & CO.

DEALERS IN

**GOLD AND SILVER WATCHES,
RICH JEWELRY, SOLID SILVER WARE,
TRIPLE-PLATED WARE, CLOCKS, BRONZES, &c.**

Agents for the American Watch Co. of Waltham.

In our stock can be found WATCHES from the most celebrated makers of EUROPE as well as from the widely known AMERICAN factories; JEWELRY of every description, in

DIAMONDS, PEARLS, CAMEOS, &c.

SOLID SILVER WARE of chastest styles, suitable for Wedding Presents and for Prizes for Agricultural and Horticultural Societies; **SILVER PLATED WARE** of the best manufacture; **Fine Table Cutlery, &c.**

Also Agents for the celebrated "DIAMOND" SPECTACLES and EYE-GLASSES, the most perfect in the world.

(Sign of the Big Clock.)

LARMOUR & CO.

195 West Baltimore Street, Baltimore, Md.

WATCHES and JEWELRY repaired in the best manner and warranted.

may-1y



We will purchase and have carefully shipped, by whatever mode of transportation may be designated:

FERTILIZERS of every description sold in this market—and there is, probably, no other city in the Union which offers better facilities for this purpose. We will buy, and deliver from the Peruvian Agent's Warehouses, whenever the order is sufficiently large to warrant it,

PERUVIAN GUANO.

Also the various **PHOSPHATIC GUANOS** imported into this port; **BONE DUST** from the best manufactures of this vicinity or the cheaper kinds from a distance, as may be ordered by the purchaser;

Land Plaster, Oil Vitriol, and all Chemicals Required

In the manufacture of **HOME MANURES** or **SUPERPHOSPHATES**, from the most reliable factories.

FRUIT and **ORNAMENTAL TREES, SHRUBBERY, Field, Garden and Flower SEEDS.**

All kinds of **AGRICULTURAL IMPLEMENTS** and **MACHINERY** at manufacturers' prices. Likewise,

Cattle, Horses, Sheep, Pigs, Poultry, &c.

Of the improved breeds. In this vicinity, in some particular kinds of stock, a better selection can be made than elsewhere, and special attention will be given to buying and forwarding such animals as may be ordered.

TERMS CASH (or its equivalent.)

Sam'l Sands & Son,

No. 9 North St., near Baltimore St., Baltimore, Md.

Wm H. Atwell

THE NEW LIGHT-RUNNING
“HOWE”



SEWING MACHINE

HAS JUST BEEN AWARDED THE
HIGHEST PREMIUM!
AT THE
Vienna Exposition,
FOR ITS SUPERIOR SEWING & STITCHING!

GENERAL OFFICE FOR THE STATES OF
Maryland, Virginia, N. Carolina, S. Carolina:
38 N. Charles St.
BALTIMORE, MARYLAND.

AGENTS WANTED in every County of the above States.

Liberal inducements and large pay to energetic men.
Wagons furnished and no Capital required.

Machines Sold on Easy Terms.